

SECTION A STATEMENT OF WORK

01) About the Global Fund-Building resilient and sustainable systems for health

The Global Fund disburses nearly USD 4 billion a year in grants of which nearly 50% is invested in health products to support implementation of selected HIV, TB & Malaria prevention and treatment interventions.

Building resilient and sustainable systems for health is a pillar of the Global Fund corporate strategy 2017/2022. The Global Fund recognizes that a well-functioning and responsive supply-chain is critical to building resilient health system. Implementation of the full range of program interventions/services is not possible without the uninterrupted availability and appropriate use of core products. To date, Global Fund investments in supply chain have focused on supporting the national systems to improve supply chain performance and outcomes. These efforts have as a result improved product availability and positive treatment outcomes, supply failure has been prevented and lives have been saved; however, improvements have been tenuous and short lived, and sustainable systems have yet to be built.

The lack of adequate supply chain data to inform SC planning and operations management decisions is a major risk to achieving impact of Global Fund supported programs. Government Ministries of Health, partners and grant implementers recognize that LMIS/HMIS (DHIS2) data integration will facilitate improved monitoring of product use, product availability at service delivery points, SC strategic planning and operations management as well as improved program/grant implementation, data quality and client services.

Global Fund aims to catalyse SC investment to strengthen supply chain data management and data use including integration with DHIS2 in selected countries.

02) The system Rationale for integration of LMIS and HMIS data in Sierra Leone

One of the GF strategic priority on data systems is to achieve eLMIS/HMIS interoperability to enable improved program management. This objective is also consistent with the HTC – LMIS Working Group priorities. The DHIS2/eLMIS interoperability initiative is jointly supported by MECA and SC department at the Global Fund.

Furthermore, DHIS2 has improved HMIS data management and is now adopted by over 50 national Ministries of health including Sierra Leone as platform for health information management. DHIS2 offers easy to use advanced data analytics and visualization features (dashboards, trend/score charts, GIS maps, pivot tables, etc.) and enables thousands of concurrent users to access hundreds of millions of data records using only a single, standard web-server. The development of DHIS2 is supported by Global Fund and other international partners and governments to manage health service statistics, aggregate case data, lab service data, etc.

In Sierra Leon, there are four systems (mSupply, Channel, Pharmaceutical Dashboard and DHIS2) in use that collect HMIS and LMIS data, which DDMS and other programs use to inform quantification, procurement, distribution, and reverse logistics across supply chains. Since the HMIS-LMIS integration meeting in January 2018 significant progress has been made to move forward LMIS systems and HMIS-LMIS integration in Sierra Leone including.

- Central level rollout of mSupply an electronic logistics information systems (eLMIS) used to manage government inventory
- Rollout of mSupply in 8 districts at hospital and district stores



• Pilot of RRIV integration into DHIS2

Prior to the pilot RRIV integration the paper based RRIV forms were collected monthly at district level and entered into Channel. This process was slow and tedious for District Information Officers responsible for this task. These records were then extracted into excel and shared with DDMS. There was no consistency across naming of drugs and the process to collate, clean, and analyse this data required at least a week of full time work.

Data entry directly into DHIS2 through the RRIV integration allows this data to be immediately available at central level upon entry and eliminates all the work required for data collating and cleaning. However, if the data entry format and reports being produced by DHIS2 do not address the needs of the program then data could be lost, integrity compromised, and additional work required to conduct analysis and extract data from DHIS2

Based on this a technical assistance service provider is being proposed to harness this opportunity to review the data and data entry from pilot, incorporate required changes, plan the round of DHIS2 integration rollout, and support this training and rollout. This support would build upon existing activities and catalyse critical improvements towards ensuring the availability of improved supply chain data to inform key activities, avoid stock expiries, and prevent stock outs.

The use of DHIS2 presents an opportunity to improve existing SC data analytics and accelerate the integration of SC indicators into the national health sector monitoring and evaluation framework.

03) Purpose and objective of the technical assistance

The Global Fund seeks to support the country to design and implement the HMIS/LMIS data integration project. The purpose of this support is to provide technical support to the Directorate of Drugs and Medical Supplies (DDMS) to leverage existing LMIS activities to ensure the successful completion of the integration of the RRIV forms into DHIS2

The objectives of this support are

- a. To provide technical assistance to support DDMS on implementation of the monthly RRIV data management review and response system, which can be used to identify and respond to reported stock outs and target facilities with data quality problems for improvement
- b. To ensure that RRIVs are integrated into DHIS2 in order to make available real-time access to critical PHU stock data
- c. To provide technical support on mSupply rollout to district level per the rollout plan identified by DDMS

04) Activities, scope and expected outcomes

In collaboration with DDMS, DPPI, and partners:

Review of pilot

- 1. Liaise with DDMS, DPPI, NMSA, Programs, CHAI, PMI, and other supply chain partners represented in the LMIS sub group to identify current status of integration, key challenges, and required outputs (reports, indicators and format needed)
- 2. Review RRIV paper forms, output currently received in Channel, and current forms for data capture on DHIS2 to understand data entry and output



- 3. Conduct in depth assessment of the RRIV data entered into DHIS2 for the duration of pilot through analysis of data quality, consistency, and reporting rates
- 4. Solicit, document, and review feedback from District Information Officers in all four pilot districts to better understand key benefits and challenges with the DHIS2 data entry
- 5. Provide analysis and written recommendations to LMIS sub group for implementation by technical assistance service provider in collaboration with this group
- 6. Engage with DDMS, DPPI, and LMIS sub group to identify and decide upon recommended improvements and changes required based on recommendations

Incorporation of changes

- 7. Work with DPPI to implement back end modifications in the DHIS2 system to improve consistency across data systems, improve ease of data entry, and reduce errors
- 8. Work with DPPI to implement back end modifications on the report output to be generated from the DHIS2 data to ensure that all information required by DDMS and programs is easily available in a format that will facilitate improved data usage
- 9. Engage with DDMS and the LMIS sub group on an ongoing basis to document required changes, make note of changes made, and solicit feedback on suitability and sufficiency of changes

Plan and support the next RRIV integration training

- 10. Develop and deliver, with DDMS, DPPI and partners, a training for all remaining districts on the data entry and report generation for the RRIV into DHIS2 to ensure that the integration is complete nationwide
- 11. Develop a district level SOP for the monthly data entry process and follow ups to facilities
- 12. Develop specific quality assurance metrics based on RRIV data in DHIS2 for FHC, RH, Malaria, HIV, and TB, that can trigger follow up and response at district and PHU level e.g. stock out warning report which outputs list of facilities by district which have reported stock outs for a specified set of products per program
- 13. In collaboration with DDMS, design a monthly data analysis process for responsible technical DDMS staff and train them on this process to produce a monthly actionable RRIV data summary report to be provided to management each month

Other

- 14. Engage with and provide information to the University of Oslo and the developers of Pharmaceutical Dashboard (PD) as needed to aid the back-end integration of the RRIV data from DHIS2 into PD
- 15. Throughout- ensure that plans and actions agreed are communicated to relevant stakeholders

Expected outcomes:

Improved SC data availability/quality, improved SC performance monitoring (analytics and SC visibility), and enhanced communication between health program managers and SC managers. Ultimately, this will contribute to improve products availability at health facility level (KPI 6b).

05) The Recipient

The recipient of the technical assistance to be provided under this consultancy is the Government of Sierra Leone's Ministry of Health and Sanitation.

o6) Reporting and duration



The technical assistance service provider will provide updates/progress reports to DDMS including fortnightly written updates and presentations at the LMIS sub-group and FHC Operations Meetings when requested. The service provider will combine a small team of experts to deliver the project

The maximum duration of this assignment is six (6) months starting Q3 of 2019.

07) Qualification requirements of the technical assistance service provider

Experience

- Proven track record of successful design and implementation of LMIS-related projects including the set-up or reconfiguration supply chain or HMIS software solutions.
- Experience with configuration and roll out of DHIS2 and/or mSupply software in a national program including the set-up of indicators (dashboards) to facilitate data use.
- The team MUST demonstrate sound and practical understanding of HMIS and publicsector supply-chain systems and processes, especially in the context of the international development/humanitarian sector
- Experience in providing technology system post-implementation support including requisite maintenance and capacity building of local teams
- Significant coverage or presence, including having registered partners/agents, to ensure optimum service delivery spanning several countries in multiple geographical regions is desirable
- Demonstrate in-depth understanding of cross-cutting issues in health service delivery beyond supply chain management.

Skills & competencies:

- Leadership and strategic planning; integrated approach to service delivery;
- Diplomacy and cultural sensitivity:
- Strong project management and analytical skills, ability to work under pressure and on budget, and teamwork and team building skills. ability to synthesize and summarize results:
- Service provider staff or consultant(s) must be fluent in English and travel and work in Sierra Leone.

Below are the desired qualifications/experience of individual experts on the project team

- A Bachelor's degree in Computer Science, Public Health, Statistics, or other related disciplines from a reputable university and 3-5 years' work experience OR a master's degree and a minimum of 5-year work experience;
- Experience working in software development / supply chain and/or public health in Sierra Leone
- Excellent knowledge of HMIS/LMIS methods, including experience reviewing, developing, and/or implementing HMIS systems or systems integration;
- Ability to interpret and evaluate the design, coordination, and execution of an HMIS/eLMIS system
- Experience on back end administration of DHIS2
- Strong written and verbal communication skills, including the capacity to synthesize data into an effective presentation of results to help guide recommendations on performance improvement;
- Exceptional ability to work independently and to develop and execute plans to achieve specified impact with limited guidance and oversight, including an ability to multi-task and be effective in high-pressure situations;

The Global Fund

- Excellent quantitative, problem solving, analytical and statistical analysis skills (including strong Microsoft Excel skills) to compile and analyze complex data sets and produce actionable recommendations
- Exceptional strategic-thinking, and interpersonal skills, and an ability to engage productively with a wide range of stakeholders in the public sector