

Email: shdephakahama@yahoo.com Website: https://www.shdepha-kahama.com/

INVITATION FOR TENDER No. SHDEPHA +/KHM/2022-07/HQ M&E SYSTEM

TECHNICAL TERM OF REFERENCE (ToR) FOR THE DEVELOPMENT/DESIGN OF THE PROGRAM DATABASE/ONLINE SYSTEM FOR DATA COLLECTION AND REPORTS PRODUCTIONS

PROJECT NAME: Database System

1. BACKGROUND,

SHDEPHA+ is an acronym for Service, Health, and Development for People living with HIV/AIDS. It is a national non-governmental organization, registered on 21 November 1994 with registration number SO 8216. SHDEPHA+ originated from the initiatives of fifteen people living with HIV/AIDS whose goal was to create a network and to mobilize resources to help people living with HIV/AIDS and to fight the spread of the disease. Although originally focusing on people living with HIV/AIDS, over the years SHDEPHA+ has expanded beyond HIV/AIDS and related issues to other development interventions and now covers both infected and affected by HIV/AIDS with over 65 branches countrywide. Each branch of SHDEPHA+ works independently, developing, managing and implementing its own projects; though all branches share one constitution and registration.

2. STATUS OF THE INFORMATION FLOW

The organization works on various indicators both donor and internal. There is an Indicator Reference Sheets, which provides relevant details for each indicator by Project. The tool uses both national and internal tools to capture both client level or aggregate data. All these are currently collected in hard copies and organization face a lot of challenges during data collections, data compilation and data reporting to the next level due to incompleteness, delays, missing information and shortage of tools in some geographical settings.

2.0 Current practices in Data management plan

SHDEPHA+ uses defined tools and protocols to conduct regular and rigorous project performance monitoring and evaluation that includes routine collection of data during project implementation and inputting the data in the database, which enable generating timely, reliable, and gender disaggregated data for annual reporting. The protocols are developed for each data collection tool and used to guide data collection and help collect quality data that is reliable, valid, consistent, and of high integrity. SHDEPHA+ Kahama prioritizes continuous engagement of local government authorities at regional, district, ward and village level as meaningful partners in project monitoring, and will conduct joint support supervision visits on monthly and quarterly basis to ensure quality programming.

2.1 Data collection

SHDEPHA+ employs various data collection techniques, including monitoring forms, interviews, and questionnaires. Onsite level data at community level, health facilities and school are collected from the deployed project community volunteers, health care workers, teachers, local government officers and gender desk officers.

The M&E Unit of SHDEPHA+ ensure that all the data collection tools include all data elements that are required for disaggregation and reporting as per the donor, GoT and other stakeholders requirements. All project staff, service providers and other beneficiaries are required to collect data at projects areas and are oriented and trained on the whole process of data collection including but least tools filling, data quality checks, validation, storage, reporting and management when at field level.



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2.2 Data Entry and Analysis

SHDEPHA+ uses paper-based reporting systems for clients recording. Project Electrical recording/ database are used to allow real-time data capture, remote submission and aggregation of data to enhance Community-based referral systems across SHDEPHA+ services. Web database, Grant Management systems, Epi info database, info link, field link, Power BI, advanced excel are both means of Case based database for reporting employed by projects as per donor requirement.

The Goal of this RFP is to ensure that SHDEPHA+ Programs are on track to meet its overall goals and objectives, the indicators to be measured against targets set, will either reflect the underlying assumptions, secondary data, donor or government requests made in program design about what each activity will likely achieve.

To achieve the above goal SHDEPHA+ for easy service delivery to the clients, resorts its efforts to establishment of the robust online database, which will replace all the activities for data collections currently done manually.

SHDEPHA+ enthusiastic to support the implementation of its M&E framework via online system which can be accessed from anywhere in the world using any device (PC, Laptop, Tablet or mobile) having internet access. These features will help us to establish a system that will provide day to day monitoring of SHDEPHA+'s implementation, collect the missing baselines, track the progress on achieving its results and provide reporting.

3.0 OBJECTIVE

The main objective of this TOR is request for support to design a health information system in DHIS 2 for entry, analysis, reporting and performance tracking of the project's internal indicators in order to inform decision-making and project interventions.

3.1 TECHNICAL TERMS AND CONDITIONS/ SCOPE OF WORK

As per SHDEPHA+ guidance, the consultant will ensure throughout the development, training and maintenance of the software package for Program Database System in line with the context of Tanzania Health services delivery systems and geographical localities.

This consultancy will aim to design an Information System for the project with the following:

- A proper data management system to capture and store data from all project's routine activities. The system should be able to capture data from internal project activities and summary information from DHIS 2 on project indicators.
- Functionality to monitor and track work plan activities; summarizing completed activities and those not completed in a certain time period.
- Reporting capabilities; customizable as needed to report on project's routine activities

The activities include:



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- Discuss with project's M&E focal person the conceptual design behind the database, queries and reports expected prior to configuration of the database. See Table 1 for some system requirements
- Design a data dictionary; standardized for variable names across projects' routine activities to ensure that all variables referring to similar measures (questions) are named uniformly across datasets
 - Tools used for the data collections This is significantly important when designing the system to
 ensure that all the indicators captured through those tools are well included and correctly aggregated
 for reports production
 - Types of the information required the system to capture both aggregate and individual level
 information's perhaps to allow you work on any information you need for whatever report you may
 want to provide to your supervisors or donor or government.
 - Frequency of Reporting This will also be factored in as there are reports that you may need to share on daily basis, others on weekly basis, others on monthly basis or quarterly reports respectively.
 - Hierarchy of reporting This is another issue that will be included to make sure that you can share
 your reports with different levels eg. if working at the community level the lowest point to store or
 capture your data is a ward, then facility for those
 - o clinical interventions indicators, district levels and regional levels for aggregate information
 - O Training Train the project members in the management of the database (how to update, edit and delete information, add fields and produce new reports as needed). Provide capacity to expand database use. The training will involve all those system users including System Administrator, Data Administrator, Network Administrator, Managers and other end users specified by the client. The list of master trainers will be provided by the client one week before the trainings begins. A minimum of two representatives from each division of organization will be trained as master trainers on the usage and operation of the System/database. On completion of the training, the master trainers and Users will be performing a rigorous test on the system and submit their observation(s). The observations will cover the following topics: · Comments on the training lecture, coverage, materials & lab sessions; · Comments on User Interface and suggestions for betterment; · Comments on operational flow; · Response time of the system; · Bugs encountered and error management facilities; · Data validation and security measures.
 - o **Mobile Apps Integration** As per the current era the system will be developed in such a way it can allow the usage of the mobile apps and other contemporary reports collections gadgets,
 - System Hosting and Maintenance Will be issues that will need to your attention and clear commitment how will this be happening to keep everything running and keep working, as you scale up might need to add other variables the system. Related to this are issues of software updating and other relevant APKs for the Apps if that will be one of your interest in the near future
- Database back-end design: Work in consultation of the M&E focal person in developing the database's underling forms, sheets and tables
- Database front-end design: Work in consultation of the M&E focal person to determine the preferred interface for customizable display of data
- Set up the system project's server

In summary, the scope of the work is as below:



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Table 1: Database system requirements

Database/system Requirement	Detail	
Platform	Should be flexible to be used online and offline with different Specifications. Should support most major requirements to capture data collected routinely, periodically throuse surveys and accommodate queries for data tabulation and graphing. The software used should be of generic & modular structure allowing the project to build its growing need it	
	 The System Administrator should be able to enable several options regarding password requirements, login attempts and automatic client logoff. In addition, the system among other things will be bilingual that Supports English Languages. Will ensure data availability at the centralized location and can be accessed by authorized users from anywhere Authorized users can generate dynamic reports by using filters and queries to extract relevant data in Different kind of formats for generating reports (Word, Excel, PDF, Email, Printer), Authorized users can generate reports in form of graphs and charts The system will have a Dynamic Dashboard with advanced Graphical depictions. System administrator can add users and allocate user rights for accessing features and data - System administrator can block and unblock users 	
	The password options should include: Expiration of the user's initial password Expiration of passwords after a specific number of days Password recycling Case sensitive passwords Mixed case passwords Require numbers and letters Require a minimum length The System Administrator should get an audit trail to track successful and unsuccessful login attempts Levels and privileges: The system should allow for fine-grained access control availing functionalities only those groups permitted by the administrator	
Users and roles		
Hierarchy	The system should be able to display aggregated results and indicators for all levels for instance region, district ,Health Facilities contributing data; disaggregated at all those	



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	levels. The system should also be able to approve entered data from the lowest level to higher level
Allowance for incorporating data entry	The system should provide for incorporation of data entry forms and validation rules, and
forms	reference across fields,
forms	reference across fields,

i. Provide the Plan for recovery, if the software package or the database fails, which includes managing backups of the database and the package itself. Perform necessary recovery of the system when needed.

Note – Any Change to the original Request, Charge will be estimated in terms of the person-day rate that will be shared in the financial proposal for the entire activity in relation to each person who will be involved in the change management. The rates will be valid for the agreed time. The total cost for the change will be worked out from the quoted rates and the total man-days needed to address the change.

System Architecture

The Architecture of the system will be component based where the components can be separated or integrated easily. The components will be well defined so that modules can be reused where and when required, with adoption of the Modular approach of design. The system will also be able to capture and preserve time series data so that certain information is not lost

Checklist of Project Deliverables

- 1. Responsible project M&E team will provide the routine data collection tools, reporting templates and a list of users with defined levels to the consultant
- 2. Database conceptual model developed
- 3. Database underlying forms, sheets and tables developed Comprehensive data dictionary developed
- 4. User and Administrator Manuals for the system including Online Help
- 5. Setup and Release notes for each new release
- 6. Test Cases and Reports
- 7. Training of trainers
- 8. Any other relevant documents, supporting software

3. Timelines

Deliverable	Deadline
Database conceptual model developed	TBD
Comprehensive data dictionary developed	TBD
Health Information system designed	TBD
Administrator and Editor Guidelines available	TBD
Finalized database with all comments	TBD



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Functional Health Information system	TBD
	TBD
Occasional system support	

SECTION II INSTRUCTIONS TO APPLICANTS

- 1. Submission of Application
- 1. Applications shall be submitted in sealed envelopes marked with the tender name and reference number and deposited before 5.00 pm, October 27, 2022 on 2400hrs local time and opened promptly thereafter as per address below;

Executive Director, Service Health and Development for People Living Positively with HIV/Aids, P.O.BOX 564, Kahama- Shinyanga.

OR Via procurement.shdepha.org

- 1.1 Failure to provide information that is essential for effective evaluation of the applicant's qualification or to provide timely clarification or substantiation of the information supplied may result in the **Applicant disqualification.**
- 1.2A short listing of suppliers will be done considering the applicant's general and experience, personnel, and capability.
 - a. Documentation
 Suppliers, service providers and consultants must comply with all documentations that prove its eligibility and existence.
 - b. Experience
 - Prospective suppliers /service providers/consultants must have carried out successful supply and delivery of similar items/services to Non-Government Organizations, Government, Corporation, Institutions of the Similar Size. Must require special experience and capability to organize the execution and delivery of services at short notice.
- 2. Brief Contract Terms Guidelines
- Contract Price: The contract shall be of unit price type or cumulative of computedunit price and quantities/number of services required. Quantities may increase or decrease as determined by SHDEPHA. Prices quoted should be **VAT inclusive.**
- Interested applicants may obtain further information by contacting the procuring department through; **Email:** procurement@shdepha.org 08:00-17:00 on Mondays to Fridays inclusive except on public holidays.