Request for Proposal (RFP) for Cloud-Based DHIS2 Server Hosting, Maintenance, and Technical Support

RFP Issuance Date: November 11, 2024
Submission Deadlines: December 13, 2024
Questions: November 20, 2024
Submit questions and proposals to MEL-RFP@seedglobalhealth.org

1   Background of Seed Global Health

Seed Global Health (Seed) is a nonprofit organization operating in four countries - Malawi, Sierra Leone, Uganda, and Zambia - with over 65 staff members working across five offices. We collaborate with more than 15 partners, including academic institutions, health facilities where students receive practical training, and the Ministry of Health. Seed envisions a world where every country has a robust health workforce capable of meeting the health needs of its population.

Seed's mission is to educate and empower a rising generation of health professionals, ultimately improving health outcomes and saving lives. We support health systems through three interconnected pathways: Education, Practice, and Policy. Educating and training health professionals, strengthening clinical practice, and advocating for policies supporting the health workforce ensure high-quality healthcare is accessible to all.

1.1   **Our Approach:**

Education: Enhancing the quality of professional health education by placing educators in schools and building teaching capacity in academic institutions.

Practice: Supporting health workers in implementing best practices and quality improvement (QI) initiatives within health facilities to improve maternal and neonatal health outcomes.

Policy: Advocating for policies that support health worker education, retention, and deployment to strengthen health systems.

Seed aims to build a sustainable health workforce through these pathways and improve health outcomes, particularly maternal and neonatal care. Our Theory of Change (ToC) provides the strategic framework for our work, guiding our Monitoring, Evaluation, and Learning (MEL) Strategy and ensuring that our activities lead to measurable and impactful outcomes.

2   Project Overview and Objectives

To support our efforts, Seed seeks a qualified vendor to provide comprehensive support for implementing, hosting, and maintaining a cloud based DHIS2 server. This system will enable Seed and its partners to collect, manage, and use data for evidence-based decision-making, enhancing program effectiveness and health outcomes. The system will support data tracking at various levels, including Quality Improvement (QI) projects, maternal and neonatal health outcomes, training activities, and health workforce development, all aligned with Seed's Theory of Change.

The project will be implemented in two main phases:

Phase 1: Procurement and Hosting

The vendor will procure a cloud-based server and establish the hosting environment, ensuring it meets all technical specifications. This includes setting up a secure, scalable, high-performance infrastructure to support Seed's data management needs and ensuring compliance with data security protocols.

- **Seed Participation in Selection and Approval:** Seed's technical team will participate in the selection and approval process for the server procurement to ensure that the selected server aligns with Seed's data security, functionality, and compliance standards. The server vendor should present IT-related certifications, such as ISO/IEC 27001 for information security management, SOC 2 for data protection, or equivalent standards that ensure high security and reliability.

- **Documentation of Options Considered:** To ensure transparency and informed decision-making, we expect the vendor to document at least three different server options, including specifications, cost comparisons, and alignment with technical requirements. This documentation should include a comparative analysis of each option, allowing Seed's team to review and verify that the selected option best meets our needs.

- **Compliance with Anti-Terrorism and Debarment Standards:** While not always typical for technology procurement, Seed may consider implementing anti-terrorism compliance or debarment checks to align with broader organizational policies and funding requirements. If relevant, Seed or a vendor may conduct these checks on the provider of the selected server to mitigate any potential risks associated with international or restricted transactions.

Phase 2: Development and Configuration

Develop the central data reporting system and repository using DHIS2 to manage data across Seed's programs and partnerships, ensuring effective data integration, reporting, and visualization. The vendor will configure data entry forms, indicators, dashboards, and quality checks to facilitate accurate tracking and analysis across Seed's programs and partnerships.

Outcome: A solid foundation for DHIS2 implementation, enabling smooth data integration and effective data use across all programs and partnerships.

3   Scope of Work

The RFP consists of two main components:

Component 1: Cloud-Based Server Hosting and Maintenance

The selected vendor will be responsible for:

- **Server Procurement and Hosting:** The vendor will procure a cloud-based server that meets its technical specifications, provides scalability, security, and high performance, and hosts the server to ensure 24/7 availability, regular backups, and robust data security measures.

- The server must support Single Sign-On (SSO), multi-factor authentication (MFA), and integration with Microsoft Entra ID to ensure secure, centralized identity management for all DHIS2 users. It must also enable SCIM 2.0 for automated user provisioning and de-provisioning between Microsoft Entra ID and DHIS2. To ensure data security, the server must enforce end-to-end encryption (TLS 1.2 or higher) for communications and AES-256 encryption for data at rest. Additionally, the server must comply with data protection regulations such as HIPAA and GDPR, particularly for managing user identity and access data.

- **Server Maintenance and Support**: Provide ongoing server maintenance, including regular updates, patches, and system monitoring; implement data security protocols to protect sensitive data; and ensure compliance with data privacy regulations.

- **Disaster Recovery and Backup**: Establish a comprehensive backup and disaster recovery plan to ensure data protection and rapid restoration in case of system failures.

- **Integration and Compatibility**: Ensure the server infrastructure is compatible with Seed's data management requirements and integrates seamlessly with other health information systems, including the Ministry of Health's HIS.

It is important to streamline how data is collected, compiled, and used for decision-making to enhance data flow and integration between the Ministry of Health (MOH) and Seed. Most health data originate from national registers, patient charts, and forms that capture individual and aggregate information.

These documents, whether recorded manually or electronically, serve as the foundation for health data collection and are compiled into summary reports, which are submitted to DHIS2 for analysis and decision-making.

Currently, health facilities use a combination of electronic medical records (EMRs) and manual data entry systems, leading to inefficiencies, inconsistencies, and delays in reporting. Seed aims to improve data quality, streamline reporting processes, and enhance decision-making at all levels by integrating these systems. Seamless data integration will reduce errors, ensure consistent data across sources, and support more accurate, timely reporting into DHIS2.

Seed will work with MOH and partners to strengthen data recording and reporting, ensuring compatibility between different data collection platforms. This collaboration will also focus on building the capacity of health workers, empowering them to use data effectively to improve health outcomes and program performance. Integration efforts will ultimately enable more informed decision-making and higher-quality service delivery across health systems.

Component 2: Technical Support for DHIS2 Implementation and Configuration

The selected vendor will provide technical support in the following areas:

- **DHIS2 Configuration and Customization:** This involves configuring DHIS2 data entry forms to capture essential data across all levels of Seed's programs and partnerships, including setting up key apps such as Data Entry, Maintenance, Data Visualizer, Event Reports, Event Visualizer, Cache Cleaner, Maps, and Menu Management.

- **DHIS2 Android/Mobile Capture App:** This involves developing DHIS2 Android/Mobile Capture App that functions seamlessly with the DHIS2 instance for capture and analysis of aggregate and individual data on Android devices including mobile phones and tablets.

- **Dashboard Development and Data Visualization:** This includes developing interactive dashboards within DHIS2 for real-time program performance and impact tracking. Recognizing that PowerBI offers enhanced data visualization capabilities, the system developer will configure APIs to integrate DHIS2 with PowerBI, ensuring seamless data flow between the two systems. This integration will leverage PowerBI's advanced visualization features to produce more impactful, visually appealing data dashboards, enhancing the overall monitoring and reporting experience.

- **Data Quality Assurance**: Implementing internal data quality checks, validation rules, and data integrity protocols to ensure the accuracy and reliability of data collected.

- **Training and Capacity Building**: Providing training sessions for Seed's MEL team and partners on DHIS2 data entry, reporting, data quality checks, and dashboard utilization. Developing user guides and training materials to support ongoing capacity building.

- **Ongoing Technical Support:** Technical assistance for troubleshooting, system updates, and enhancements.

  a) Prompt technical assistance for troubleshooting issues, with a clear and well-defined response time for different levels of issues (e.g., critical, high, medium, low).

  b) The technical support team should engage with end users professionally, clearly, and timely, providing regular status updates on issues and ensuring transparent communication throughout the troubleshooting or system enhancement process.

  c) User feedback mechanisms should be in place to allow end users to report issues and request enhancements easily, with follow-up actions documented and communicated.

  d) Support should include ongoing user training and knowledge sharing to empower end users, ensuring they can maximize system updates, new features, and enhancements.

4   Key Deliverables

The key deliverables for the selected vendor include:

i.   A fully functional and secure cloud based DHIS2 server that is hosted and maintained.

ii.   Customized DHIS2 data entry forms, indicators, and data visualization dashboards configured according to Seed's program needs.

iii.   Customized DHIS2 Mobile/Android app version containing features depicted in the DHIS2 instance.

iv.   Comprehensive training sessions and user manuals for Seed staff and partners.

v.   Regular system maintenance, technical support, and troubleshooting services.

vi.   Integrated data quality assurance mechanisms within DHIS2.

5   Requirements for Applicants

Interested vendors should submit the following:

- **Technical Approach:** A detailed description of the technical approach for server hosting/maintenance and DHIS2 configuration.

- **Work Plan and Timeline:** A comprehensive work plan outlining the timeline for all deliverables, including key milestones for each project phase.

- **Cost Proposal:** A detailed breakdown of costs for each component, including server hosting, maintenance, and technical support. Provide a payment schedule based on deliverables.

- **Experience and Qualifications:** Evidence of previous experience with DHIS2 and PowerBi implementations, cloud-based hosting, and technical support, particularly within health systems in low-resource settings.

- **Vendor Team Structure:** Information on the team members involved, their roles, and relevant experience.

- **References:** Provide at least three references from previous clients for similar projects.

- **Assumptions, Risks, and Mitigation Strategies:** Identify any assumptions, potential risks, and proposed mitigation strategies.

6   Proposal Evaluation Criteria

Proposals will be evaluated based on:

- Technical Approach: The vendor's approach to server hosting, maintenance, DHIS2 configuration, and training.

- Experience and Expertise: Proven experience in DHIS2 implementation and health information systems projects.

- Cost-Effectiveness: Overall cost proposal and value for money.

- Timeline and Work Plan: Feasibility and clarity of the proposed work plan and timeline.

- Quality of Proposed Training and Support: The vendor's capacity building and support plan.

7   Submission Requirements

- Submission Date: All submissions are due by December 13, 2024.

- Format: Submissions should be in PDF format.

- Maximum Length: 15 pages maximum, excluding appendices.

- Please send completed proposals via email to MEL-RFP@seedglobalhealth.org

- Questions: If you have any questions regarding the submission requirements or project details, please get in touch with us by November 20, 2024.

8   Additional Information

This RFP represents an opportunity to contribute to Seed Global Health's mission by establishing a robust DHIS2 system to enhance data-driven decision-making, quality improvement, and evidence-based program management. The implemented DHIS2 system will be crucial in tracking Seed's Theory of Change, supporting our education, practice, and policy work, and improving maternal and neonatal health outcomes across partner countries.