

United Nations Children's Fund (UNICEF)

Vientiane, Lao PDR

Individual Consultancy: National consultant to support Planning and Implementation of Electronic Immunization Registry (EIR) in Lao PDR

Terms of Reference

1. Background:

The digital health ecosystem in Laos consists of a mix of several client-centric paper-based and digital systems. The Ministry of Health (MoH) has thus far concentrated its digital health efforts on consolidating District Health Information System 2 (DHIS2) as a Health Management Information System (HMIS). This provides aggregated, high level health data for operational planning. Up until now, COVID-19 vaccination information has been captured on a paper-based COVID-19 Vaccination Registry (CVR) and entered into DHIS2 Tracker. The CVR is a confidential, population-based, and longitudinal information system that contains personal profiles and data on vaccine doses administered in a specific geographic area. The system allows for monitoring of vaccination coverage by service provider, vaccine type, dose, age, sex, target group, and geographical area, and facilitates individualized monitoring of immunization recipients. Once the COVID-19 CVR has been digitized it provides precise information. It is designed to capture data over the course of the COVID-19 immunization service, including initial enrollment, first dose of vaccination and follow up dose vaccinations. As a result, the CVR facilitates the day-to-day activity of the health workers.

Health workers require an internet connection to input their data into the DHIS2 Tracker, which is difficult to access in remote areas at the community level. In these cases, the forms are collected at headquarters and the data is manually entered into DHIS2. This creates big information backlogs making it hard for the government to make informed decisions relating to COVID-19.

The Lao MoH has, with support from HISP Vietnam, now launched the Lao COVID-19 DP app. Patients can use the app to access their vaccine history as well as a digital certificate. In addition, a preregistration system has been developed. This COVID-19 DP app allows those who are eligible for COVID-19 vaccination to pre-register and schedule their vaccination appointment in advance either through the app or via a custom web application. The app has been linked to DHIS2, as it is DHIS2 that generates secure QR codes necessary for establishing vaccination status.

For Routine Immunization, the process is still fully paper based, and vaccinations are recorded in the mother and child health or 'pink' book that a mother receives for each pregnancy, which is intended to guide them through ante-natal care. Data of Expanded Programme on Immunization in tally sheet by each antigen collected is entered to DHIS 2 and analyzed. All Adverse Events Following Immunization are monitored by WHO, and this system is also paper based. There is scope to digitize both processes and make the appropriate investments in systems and technologies.

2. Purpose:

Laos's success in deploying DHIS2 for COVID-19 response is due to a combination of local capacity and experience. Laos has used DHIS2 as their national-level HMIS since 2015. In recent years, the Lao MoH has also deployed DHIS2 for key health programs — including HIV, Malaria, Tuberculosis — using standardized DHIS2 metadata packages with the implementation of these systems, assisted in customizing them to the local context, and provided capacity building training for MoH personnel.

This prior experience and history of collaboration, as well as the availability to share the Lao organization unit hierarchy and other key data from the HMIS to the new COVID-19 system, meant that health authorities in Laos with support of stakeholders could quickly deploy DHIS2 to help address the COVID-19 crisis. The experience that Laos has gained during the COVID-19 response can be leveraged for implementing electronic immunization registries (EIR) in the country.

3. Work Assignments:

Under the overall supervision of HSS Manager, the consultant will support implementation of EIR tracker in Lao PDR and will assist Immunization team in smooth execution and coordination of following tasks:

1. Assist UNICEF office Immunization team in developing an action plan for EIR implementation and its linkages with DHIS2 and Immunization information system.
2. Assist T4D Specialist (Health) for setting the data processes to align with the country immunization program.
3. Assist UNICEF office Immunization team to ensure EIR is in line with the country immunization programme's priorities and ensure compliance with interoperability standard with DHIS2/Immunization Information System.
4. Participate in the EIR piloting, testing and verify the testing results in identified geographies before nationwide implementation.
5. Working with the MOH teams from DPC, MCHC, NIP and T4D specialist of UNICEF for inclusion of piloting findings and improving/ adjusting the software and fixing any issues.
6. Identify required modifications, ahead of time, in the existing data collection and monitoring platforms, or developing a dedicated system, based on defined standard requirements
7. Support in designing training package for health staff across country for implementation of EIR (Agenda, Modules, PPTs).
8. Capacity building of national and subnational staff on EIR and it's uses.
9. Support in developing a mechanism for concurrent monitoring of EIR implementation, identification of key challenges and suggest recommendation to improve it's coverage.
10. Regular analysis to triangulate data with DHIS2 & other digital systems to improve its performance.

4. Qualifications or Specialized Knowledge/Experience Required:

Qualifications and Experience

University degree, masters or above in any relevant field including, but not limited to: Public health, social science, Information management or engineering. Three to five years' experience of working or managing health information management systems. Proven knowledge of implementing health/immunization information systems at national level

Knowledge and Skills

- Knowledge and experience working with Digital Public Goods such as DHIS2, OpenMRS, OpenSRP, iHRIS, OpenHIE, SanteSuite, DIVOC, CommCare, RapidPro etc. and deploying, maintaining, and scaling these technologies.

- Exposure to UNICEF, UN or other INGO programmatic areas, including (but not limited to) health, nutrition, child protection and/or education, and experience in applying open source, digital and emerging technology solutions to address programmatic issues.
- Experience in coordination with multiple stakeholders like government agencies, academic institutions, research organizations, private sector, etc. in implementing ICT projects and exploring space for collaboration and partnerships.

Competencies

View our competency framework at [here](#)

Languages

Professional level knowledge of Written and Spoken English and Lao language is a must. All reports must be submitted in English.

5. Location:

Vientiane, Lao PDR

6. Duration: 11.5 months starting from 1st Jan 2023 until 15th Dec 2023

7. Deliverables:

Deliverables	Expected deliverables (1 Jan to 15 Dec 2023)	Timeline
First deliverable	Inception report on coordination of Immunization Information System with the MOH teams from DPC, MCHC, NIP and Immunization team of UNICEF	Report. To submit by 30 th of each month
Second deliverable	Develop an action plan for EIR implementation and its linkages with DHIS2 and Immunization information system.	Report. To submit by 30 th of each month
Third deliverable	Setting the data processes to align with the country immunization program, and actions on piloting findings and improving/ adjusting the software and fixing any issues.	Report. To submit by 30 th of each month
Fourth deliverable	Align EIR pilot with the country immunization programme's priorities and ensure compliance with interoperability standard with DHIS2/Immunization Information System.	Report. To submit by 30 th of each month
Fifth deliverable	Design a training package for health staff across country for implementation of EIR (Agenda, Modules, PPTs).	Report. To submit by 30 th of each month
Sixth deliverable	Conduct capacity building of national and subnational staff on EIR and it's uses.	Report. To submit by 30 th of each month

Seventh deliverable	Develop a mechanism for concurrent monitoring of EIR implementation, identification of key challenges and suggest recommendation to improve its coverage.	Report. To submit by 30 th of each month
Eighth deliverable	Provide an analysis to triangulate data with DHIS2 & other digital systems to improve its performance.	Report. To submit by 30 th of each month
Ninth deliverable	Identify required modifications, ahead of time, in the existing data collection and monitoring platforms, or developing a dedicated system, based on defined standard requirements	Report. To submit by 30 th of each month
Tenth deliverable	Participate in the EIR piloting, testing and verify the testing results in identified geographies before nationwide implementation.	Report. To submit by 30 th of each month
Eleventh deliverable	Organize monthly and lead Immunization data analysis meeting presenting the findings from the field	Report. To submit by 30 th of each month
Twelfth Deliverable	Documentation of all the major activities and summary of key achievements and challenges as part of final report	Report. To submit by 30 th of each month

8. Reporting Requirements:

All output materials should be written in English. Deliverables should be submitted to T4D Specialist, UNICEF Health Section, Lao PDR and Department of Planning and Cooperation (DPC), Ministry of Health, Government of Lao PDR. For detailed explanation and timeline required for submission of deliverables, please see above table

9. Payment Schedule linked to deliverables:

Payment will be made a monthly payment upon receipt a monthly report and satisfactory of all work assignments. UNICEF will provide DSA (based on UNICEF rules) and travel cost during the field visits and data collection as needed.

<i>Deliverables</i>	<i>Reporting Requirements for each deliverable</i>
Total 12 deliverables to be submitted monthly reports	To be written in English, and submitted to UNICEF HSS Manager (Health Specialist)

10. Administrative Issues:

UNICEF will not provide a desk or a laptop within the office for the consultant, but a meeting room can be provided in case for external meetings..

The incumbent will work from an office of the Department of Planning and Cooperation, Ministry of Health in Vientiane. The incumbent will report to UNICEF once a week by joining the section meeting to update the progress and share plan with the rest of UNICEF Health team.

11. Contract supervisor: The consultant will work under the direct supervision of UNICEF Health T4D Specialist and DPC, Ministry of Health focal person

12. Nature of 'Penalty Clause' to be Stipulated in Contract:

Unsatisfactory performance: In case of unsatisfactory performance the contract will be terminated by notification letter sent five (5) business days prior to the termination date in the case of contracts for a total period of less than two (2) months, and ten (10) business days prior to the termination date in the case of contracts for a longer period

Performance indicators: Consultants' performance will be evaluated against the following criteria: timeliness, quality, and relevance/feasibility of recommendations for UNICEF Lao PDR.

13. Submission of applications:

Interested candidates are kindly requested to apply and upload the following documents to:
<http://www.unicef.org/about/employ/>

- Letter of Interest (cover letter)
- CV or Resume
- Performance evaluation reports or references of similar consultancy assignments (if available)

Financial proposal: All-inclusive lump-sum cost including medical insurance covering medical evacuation for the whole duration of the assignment -as part of the financial proposal submission.

The deadline for applications is December 15, 2022

14. Assessment Criteria:

A two-stage procedure shall be utilized in evaluating proposals, with evaluation of the technical proposal being completed prior to any price proposal being compared.

Applications shall therefore contain the following required documentation:

1. Technical Proposal, including a cover letter, updated CV, and copies of 2 relevant evaluations performed earlier by the consultant or 2 references.
2. Financial Proposal: proposed monthly salary.

No financial information should be contained in the technical proposal.

For evaluation and selection method, the Cumulative Analysis Method (weight combined score method) shall be used for this recruitment:

a) Technical Qualification (max. 100 points) weight 70 %

- Degree (30 points)
- Experience (40 points)
- Knowledge (20 points)
- Quality of past work (10 points)

b) Financial Proposal (max. 100 points) weight 30 %

The maximum number of points shall be allotted to the lowest Financial Proposal that is opened /evaluated and compared among those technical qualified candidates who have attained a minimum 70 points score in the technical evaluation. Other Financial Proposals will receive points in inverse proportion to the lowest price.

The Contract shall be awarded to candidate obtaining the highest combined technical and financial scores, subject to the satisfactory result of the verification interview.

15. Programme Area, Outputs and Specific Key Results Areas in the Rolling Work Plan 2022-23

Section Request: Health

Programme Area: Health

IR: 002: System Capacity for health service delivery

Milestone: 2.2 Data strengthening for improved coverage

Included in approved AWP: Yes No