

# **CALL FOR PROPOSALS**

**Review, Redesign, and Road-mapping for the  
Information Technology Enterprise Architecture of  
Selected Public Health Surveillance Systems of the  
Department of Health**



**World Health  
Organization**

**Representative Office  
for the Philippines**

## **1. Summary**

The World Health Organization – Country Office in the Philippines (WCO PHL) is looking for an institutional contractual partner for the review and redesign of the information technology enterprise architecture of selected public health surveillance systems of the Department of Health (DOH), through an Agreement for Performance of Work (APW) contract.

Specifically, the goals of the TOR are to: (a) review the functionality of COVID-19 and other infectious disease surveillance applications currently owned or maintained by the DOH, (b) assess the performance of the Online National Electronic Injury Surveillance System (ONEISS) and the performance of the Field Health Services Information System (FHSIS) as a health information system and as a statistical system, (c) develop an enterprise architecture design that will enable the DOH to meet the mandates of public health surveillance response, (d) provide prioritized strategic and operational recommendations on the improvement and/or redesign of the ONEISS and FHSIS to address system gaps/weaknesses and in view of the strategic directions set for EB-managed surveillance and information systems, and (e) develop a transition plan that will allow DOH to integrate COVID-19 surveillance information systems into its routine surveillance systems and processes.

Proposals are due by 15 October 2022.

## **2. Background**

Throughout the COVID-19 pandemic, multiple applications have been donated or otherwise endorsed to the Department of Health for use in the response against COVID-19. Examples of these applications include COVIDKaya for case data, COVID-19 Document Repository System for laboratory data and Case Investigation Form data, COVID-19 Epidemiology Data Insights for case data analysis, Feasibility Analysis of Syndromic Surveillance Using Spatio-Temporal Epidemiological Modeler For Early Detection of Diseases for modeling and projections, TanodKontraCovid for contact tracing and workplace surveillance, StaySafe for contact tracing, and the Vaccine Information Management System. These applications are being managed by the DOH. However, the multiplicity of applications with different needs and implemented standards has led to overlaps and difficulties in integration; these challenges affect the ability of the DOH to manage and maintain these applications. The DOH is in the process of transitioning COVID-19 surveillance into its routine epidemiology and surveillance functions. In the early stages of this transition, it is important to understand the systems currently in place across the COVID-19 response and routine systems in place for infectious disease surveillance and epidemiology to enable successful integration and sustainable information systems. Many lessons in data management, surveillance and reporting have been identified throughout the

COVID-19 pandemic and there is a need to integrate these lessons learned into the DOH management of epidemiology and surveillance data.

In addition, the DOH has recently set its strategic directions for the systems that it manages and the data that is produced by its systems. At present, only two of the Epidemiology Bureau's (EB) systems have been evaluated – the Philippine Integrated Disease Surveillance and Response (PIDSR) system (done by a third party) and the National HIV/STI Surveillance System (done internally with support from international health partners). While marginal improvements have been made through the years for all the Bureau's systems, there has been limited empirical evidence that would better inform such improvements or redesigns (if needed). Ultimately, EB's systems need to be assessed for their overall responsiveness to the data and information needs to realize UHC reforms.

This technical assistance is requested to roadmap current information technology architecture prior to the development of a redesign and transition plan for the COVID-19 information technology enterprise architecture of the Department of Health – Epidemiology Bureau (DOH-EB).

### **3. Timeline**

The implementation timeline for the project is from **24 October 2022 to 23 April 2023**.

### **4. Place of Assignment**

Remote work, with preference to partners based in the Philippines.

### **5. Scope of Work**

In coordination with WHO Philippines, the Department of Health, and the Department of Information and Communications Technology, and guided by the provisions of Republic Act No. 11332 (Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act), the selected contractual partner shall perform the following activities:

Output 1: Conduct an in-depth review and evaluation of DOH-EB's current COVID-19, other infectious disease surveillance, injury surveillance, and health statistics information technology enterprise architecture landscape and technical capacity.

- Deliverable 1.1: Inception report detailing the plans and procedures the institutional partner shall conduct towards fulfilling this Technical Assistance.
- Deliverable 1.2: Evaluation framework, design, and methods to be used for the review of the COVID-19 surveillance system, the Online National Electronic Injury Surveillance System (ONEISS), and the Field Health Services Information System (FHSIS)
- Deliverable 1.3: Report on assessment of the current information technology enterprise architecture design and component applications of the DOH in terms of current technical capacity, the functionality and service lifespan of currently used applications, other relationship factors and overlaps among the different health surveillance systems and COVID-19 functionalities of other National Government Agencies, and the adequacy of business process controls

Output 2: Propose improvements on or new organizational design of COVID-19 information technology, including integration into routine surveillance.

- Deliverable 2.1: Framework of refined DOH-EB COVID-19 information technology enterprise architecture framework, including comparison with the current architecture design.
- Deliverable 2.2: Recommendations for enhanced suitability, feasibility, implementation, and scaling up of the current DOH COVID-19 applications

Output 3: Develop a roadmap for the phased transition of DOH COVID-19 applications into the routine epidemiology and surveillance IT framework.

- Deliverable 3.1: Change management plan setting clear milestones for transition and evaluating which new process controls or changes can be implemented immediately in day-to-day activities.
- Deliverable 3.2: Report detailing additional staffing or resource needs for routine work and additional architecture design needs with proposals to address human resource needs.
- Deliverable 3.3: Identify possible areas for improvement through outsourcing

Output 4: Propose improvements on or new design of ONEISS and FHSIS.

- Deliverable 4.1 Recommendations for enhanced suitability, feasibility, implementation, and scaling up of ONEISS
- Deliverable 4.2 Recommendations for enhanced suitability, feasibility, implementation, and scaling up of FHSIS

Output 5: Final Technical Report

- Deliverable 5.1: Final report documenting methodology and results from all four outputs, including all evaluation recommendations, change management plans, resourcing needs, and other critical factors to implement recommendations.

## **6. Contract Time**

This contract is a review, redesign, and road mapping for the Information Technology Enterprise Architecture of Select Public Health Surveillance Systems of the Department of Health as set out in the Terms of Reference.

The contract will be completed in not more than **7** months from the commencement of the Work, or otherwise as agreed in writing among the Owner and the Contractor. The work shall be done in strict compliance with the Contract, Specifications, Schedules, and all other Contract documents and all Instructions. Failure to do so shall be at the Contractor's risk and account. Submission of Bid by the Contractor shall constitute acknowledgement by the Contractor that it is aware of and concurs with all the requirements or conditions incorporated in the Call for Proposal and the other documents.

As time is an essential element of this Contract, for failure to complete all work within the stipulated as set out in the Terms of Reference, the Owner shall charge the Contractor

liquidated damages. This shall be in the sum of 0.5% of the total contract amount per day (Saturdays, Sundays and holidays are included) but not to exceed a total of 10% (ten percent) of the contract amount. These liquidated damages shall be for the added cost incurred by the Owner for such delay and also for the inconvenience caused to the users of the Work. It is understood that this is not a penalty but a fixed sum representing the liquidated damages for each calendar day of the delay. Delay shall be counted from the agreed completion date, considering further time extensions approved by the Owner, to the date of completion of work.

## **7. Qualifications**

The contractual partner is for an individual or a team with the following qualifications:

### Education and Certifications

- Team lead must have a post-graduate degree in information technology, business administration, management engineering, or equivalent data science degree.
- A degree in organizational design or data engineering is an advantage.

### Work Experience

- Team lead must have three (3) years' experience in enterprise architecture design, IT systems evaluation, or data engineering within the last 5 years.
- Previous work experience with the DOH is desirable

### Technical Skills and Knowledge

- Able to communicate well with WHO, Department of Health, Department of Information and Communications Technology, and other relevant stakeholders
- Familiarity with concepts of digital transformation in epidemiology and surveillance is desirable.

### Language Fluency:

- Fluent in English and Filipino.

The contractor shall have no direct or indirect involvement or interest, in any form, in arms dealing, drugs, alcohol industry, tobacco industry or human trafficking. The Contractor and personnel involved in this work shall have no conflicts of interest in relation to the work being undertaken.

## **8. Other Requirements**

Online means of communication shall be the primary mode of communication used in this piece of work. Virtual monthly meetings with the DOH-EB and WHO Philippines with progress updates are a requirement of this contract.

NOTE: Every report should have the following disclaimer.

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## **9. Confidentiality and Property Rights**

The results, products, and reports of the consultancy are to be treated as confidential and must not be handed over to third parties. The WHO and DOH have the exclusive ownership of the reports and reserve the right to further disseminate relevant information. Any reproduction, citation, reference, and use of the said documents and materials requires the permission of the WHO and DOH.

## **10. Ethical and Professional Standards**

- WHO prides itself on a workforce that adheres to the highest ethical and professional standards and that is committed to put the WHO Values Charter into practice.
- WHO has zero tolerance towards sexual exploitation and abuse (SEA), sexual harassment and other types of abusive conduct (i.e., discrimination, abuse of authority and harassment). All members of the WHO workforce have a role to play in promoting a safe and respectful workplace and should report to WHO any actual or suspected cases of SEA, sexual harassment, and other types of abusive conduct. To ensure that individuals with substantiated history of SEA, sexual harassment or other types of abusive conduct are not hired by the Organization, WHO will conduct a background verification of final candidates/institutions.

## **11. Submission Requirements**

Interested institutions and/or individuals should submit electronic copies of the following:

- Cover letter
- Proposal with financial details and proposed timeline
- Company profile and qualifications of team members

Address all proposals to:

**Dr Graham Harrison**

OIC-WHO Representative in the Philippines

Ground Floor, Building 3, Department of Health San Lazaro Compound

Rizal Avenue, Sta Cruz, Manila

Please submit the electronic copy of the proposals with the title “**Review, Redesign, and Road Mapping for the Information Technology Enterprise Architecture of Selected Public Health Surveillance Systems of the Department of Health**” to Mrs Ying Chen ([cheny@who.int](mailto:cheny@who.int)) and [wpphlwr@who.int](mailto:wpphlwr@who.int). Only shortlisted applicants will be contacted by WHO Philippines.

The deadline for submission of proposals is on **15 October 2022**.