



Ministry of Health

Terms of Reference

Software Developer - backend (Local)

Maldives: COVID-19 Emergency Response and Health Systems Preparedness Project

Terms of Reference

Ref No: MV-MOH-212678-CS-INDV

A. Background

The Government of Maldives (GoM) has received financing from the International Development Association (IDA) and Asian Infrastructure Investment Bank (AIIB) under the Fast Track COVID-19 Facility (FTCF) towards the cost of the Maldives COVID-19 Emergency Response and Health Systems Preparedness Project (COVID-19 ERHSPP), and intends to apply part of the proceeds of these funds towards payments under the contract for an Software Developer for this project implemented by the Ministry of Health (MoH).

The objective of the COVID-19 ERHSPP is to respond to and mitigate the threat posed by COVID-19 and strengthen national systems for public health preparedness in Maldives. The objective will be achieved through the implementation of activities that support further prevention of COVID-19 transmission combined with activities that strengthen the health system's capacity for disease management. Both approaches are essential to the immediate response and will serve the dual purpose of simultaneously strengthening the health system beyond the current crisis for the medium term. The project has four components, summarized below:

1. **Component 1 – Emergency Response for COVID-19 Prevention:** procurement of essential protective equipment and other essential items to protect healthcare workers and patients; risk communication, community engagement and behavior change, including social distancing measures and associated mitigation strategies.
2. **Component 2 – Emergency Health System Capacity Strengthening for COVID-19 Case Management:** strengthening the centralized and decentralized health system capabilities for disease surveillance, case management and infection prevention and control (IPC).
3. **Component 3 – Implementation Management and Monitoring and Evaluation:** strengthening of public structures for the coordination and management of the project, including central and regional arrangements for coordination of activities, financial management, procurement and social and environmental management.
4. **Component 4 – Contingent Emergency Response Component:** a zero-dollar component to ensure additional flexibility in response to the current and any potential other emergency that might occur during the lifetime of this project.



B. Objectives

With the onset of Covid-19 pandemic, the Maldives endeavoured to improve the efficiency of its response operations through purpose-built software tools, enabling all operational and reporting stakeholders. These tools cater for the following broad operational areas.

- Call centre and ticketing
- Contact Tracing
- Lab test and results
- Legal document generation
- End user self-reporting portal
- Quarantine and movement management
- Facilities Management
- Regional/Atoll Coordination etc.,
- Purpose-based information generation

C. Scope of Services

Maintenance, support and feature upgrades where necessary, of digital automation tools used to facilitate Health Emergency Operation Centre's Covid-19 response and relief efforts.

- Study existing online systems used in the Covid19 HEOC operations, prepare necessary documentations where they are missing.
- Familiarise and gain hands on experience on existing systems.
- Attain a thorough understanding of HEOC operations process models and their dataflow and data assessment requirements.
- Identify gaps between online systems and requirements, propose recommendations to changes to systems and processes and make necessary alterations and upgrades to online systems to further improve the efficiency of the Covid19 relief efforts.
- Train leaders/heads in each department and the HEOC support team to use the features in the online systems.
- Monitor and understand usage gaps and make necessary alterations to system or user training where applicable.
- Assess usage to ensure the systems reflect the truth and make alterations to business processes or systems where necessary to ensure data completeness, integrity and truth. Where necessary escalate the issue to the HEOC and re-train necessary personnel.
- Take control of admin roles of all Covid19 relief online production, development and training systems.
- Take control of admin roles of the platforms used to host the systems.
- Ensure all data are secure and can only be accessed by HPA designated personnel on a need-to basis per functionality.



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- Ensure a thorough data access log regime is maintained and incorporate a Privilege Access Management (PAM) protocol into the security system.
- Provide hands-on training to Health ministry designated team to prepare them to take ownership of the online systems and control platforms
- Handing over of the project(s) related documents including the source code with documentation for the developed software, software executables, project plans, project status reports, test plans, test specifications and results, user manuals, training materials, technical manuals etc., to Ministry of Health designated team.

D. Qualification

- A degree in software engineering , computer science or relevant field with minimum 5 years' experience OR a diploma in information technology with 7 years' experience
- MUST be competent in the following software / frameworks
 - C# Dot Netcore
 - PHP (Yii framework 2)
 - Typescript/NodeJS (MEAN stack)
 - Google cloud functions
- SQL and NoSQL database systems and Business Intelligence tools
- Multi-tier application architecture and APIs
- Experience and prior involvement within Maldives' COVID-19 relief operations at NEOC and HEOC will be an added advantage.

E. Contract Duration

The contract duration is 4 months and is expected to commence in February 2021

F. Remuneration

Successful candidate will be paid an all-inclusive fee in Maldivian Rufiyaa within the scale of 22,000– 25,300. The monthly fee payment would be based on service considerations approved by progress reports dependable upon the satisfactory completion of the contract deliverables.