# **Terms of Reference (ToR)**

# Field Support Engineers (Information Technology) for Implementation, Support and Maintenance of Hospital Health Information Management System (HHIMS) ICTA/GOSL/CON/IC/2017/41

#### **Background**

The Information and Communication Technology Agency (ICTA) of Sri Lanka is the apex ICT institution of the Government. In terms of the Information and Communication Technology Act No.27 of 2003 (ICT Act), ICTA has been mandated to take all necessary measures to implement the Government's Policy and Action Plan in relation to ICT.

ICT Agency of Sri Lanka in close collaboration with Ministry of Health has initiated Digital Health Project with the goal of Improving quality, safety, efficiency and patient centeredness in service delivery of Sri Lankan state health sector using Information and Communication Technology.

Currently the Hospital Health Information Management System (HHIMS) has been successfully implemented in 15 government hospitals. Digital Health project aims to implement electronic medical records systems in 300 government hospitals covering the National Hospital, Teaching Hospitals, Provincial and District General Hospitals, Base Hospitals and selected divisional hospitals throughout the country during the period from 2016 to 2019 with the collaboration of Ministry of Health, Nutrition & Indigenous Medicine. National Steering Committee has been appointed to steer the project throughout the project period. First phase of Digital Health Project plans to implement electronic health records in 47 government hospitals in year 2017.

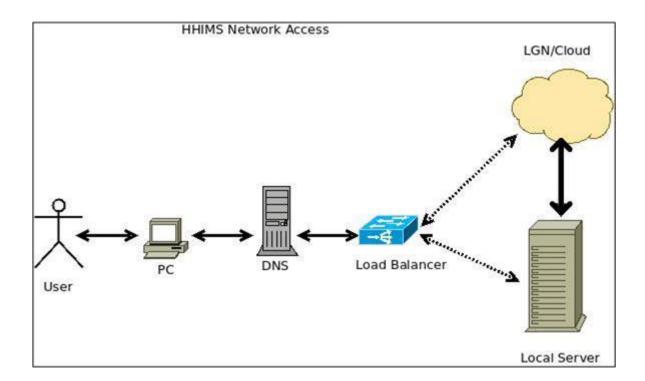
ICT Agency of Sri Lanka has identified the requirement of engaging experienced individual consultants as a field support engineers to provide the product support and maintenance in implementing HHIMS in selected government hospitals.

HHIMS is a Free and Open Source web based Hospital Health Information Management System. The system has been developed by the ICT Agency of Sri Lanka in partnership with the Ministry of Health, Nutrition & Indigenous Medicine. HHIMS includes an Electronic Medical Record, Patient admission, Appointment & Queue Management, Clinic, Laboratory Information System (LIS), Pharmacy Stock management, Notification, OPD, Questionnaire, Report, Ward management, User management, Permission and PACS modules.

## Technology used in HHIMS:

- PHP 5.5
- Codeigniter framework v 2.0.1
- Apache 2.4

Hospitals are equipped with a Wireless or Wired network to access HHIMS through web browser. Server and Client machines are installed with Ubuntu Server Operating system and Ubuntu Desktop LTS operating system versions.



## **Objectives of Consultancy**

The specific objective of this assignment is to perform required software configuration, trainings, maintenance and acquire commitments of healthcare professionals of the particular hospitals to avoid possible failures in implementation and to build up favorable system environment in order to sustain the project in long run.

#### Scope of Work

Under the overall supervision of the Programme Manager and the direct supervision of the Project Manager (Digital Health) of ICTA, the Field Support Engineers will be responsible to perform required software configurations, trainings, and attending to the maintenance issues as well as acquire commitments of healthcare professionals of the hospitals within the assigned province, to build up favorable system environment in order to sustain the project in long run.

The selected individual Consultant should support the ICTA to achieve the project results / outputs by providing inputs to implement the activities outlined in the project document in accordance with ICTA rules and regulations.

The Field Support Engineers will be based in the Office of the Provincial Director of Health Services in the respective province and will frequently visit all the hospitals selected for the Digital Health Project within the province. The scope of work of the Field Support Engineer shall cover the following areas:

- Configuration of HHIMS based on the requests raised by each hospital.
- Required Configurations and reference data maintaining would be different from hospital to
  hospital. Thus, individual consultant shall discuss and identify the specific user's requirement
  with hospital focal point and shall made necessary system configurations accordingly.
- HHIMS product maintenance in selected government hospitals as per the source released by ICTA.
- Once HHIMS is hosted, individual consultant is responsible for maintaining the software in order to ensure the continuous availability,
- Effectively communicate software related issues to ICTA technology team.
- Monitor HHIMS system data backup process to ensure its continuity
- Providing user training on each software functionality including software trouble shooting. In
  addition to this individual consultant may provide users with basic networking and hardware
  trouble shooting training to assist them in solving general issues.
- Identify network, hardware failures and communicate with respective stakeholders when necessary.

## **Competencies**

## **Corporate Competencies**

- Client Orientation: Promote the vision, mission, and strategic goals of the ICT Agency of Sri Lanka.
- Respect for Diversity: Display cultural, gender, religion, race, nationality and age sensitivity and adaptability.

# **Functional Competencies**

- Extensive knowledge on PHP, HTML, MySql, Apache
- Ability to attend in software, hardware and networking issues
- Commitment to Continuous Learning: Seek and apply knowledge, information and best practices from within and outside of ICT Agency of Sri Lanka and work as a change agent to improve the quality and efficiency in health care system.
- Encourage service delivery that is evidence based, citizen focused, ethical, equitable, standardized and client-centered.

## **Management and Leadership**

- Personal Relationship: Build strong relationships with clients, focus on impact and result for the client and respond positively to feedback
- Networking: Proven networking and team building skills
- Stress Management : Calm demeanor/ A Good humored
- Flexibility: Open to change and able to manage complexities
- Problem Solving : Ability to manage conflicts
- Communication: Demonstrate good oral and written communication skills, especially in English
- Team Work: Team player in a joint management environment and share knowledge

## **Education**

- Bachelor Degree in IT or related field from a recognized university or any other equivalent qualifications.
- Excellent knowledge in PHP, Code igniter framework and Apache
- In depth knowledge on Linux operating system
- Knowledge in Web Application Development, Database designing and development and Mobile Application Development

## Experience

- Minimum of 02 years' experience in the subject area with practical experience in software implementation
- Hands on experience on Linux operating system
- Experience on PHP, Code Code igniter framework and Apache
- Experience in conducting knowledge sharing/training sessions
- Professional client relationship skills
- Ability to learn and apply new skills and concepts quickly

## **Language Requirements**

Fluency in English and Sinhala or Tamil

**No of Positions:** 09 (01 position in each province)

**Duty Stations: Office of the Provincial Director of Health Services in the assigned province** 

Duration: 01 year

#### **TERMS & CONDITIONS**

- 1. Monthly payment will be paid upon the submission and acceptance of the Monthly Activity Log.
- 2. The attachment to the ICTA is for a period of 12 months initially. The "Individual Consultant" should maintain an activity log to be submitted at the end of the each month, which is the pre-requisite for the payment agreed upon.
- 3. The performance of the "Individual Consultant" will be subjected to a performance review after 6 months for mid-term assessment. In the event of performance issues ICTA reserves the right to terminate or renegotiate for replacement at any time.