

Terms of Reference for Individual Consultant (System Engineer) for Implementation, Management and Operations of the Lanka Government Cloud (LGC).

COUNTRY : Sri Lanka

IMPLEMENTING AGENCY : Information and Communication Technology Agency of Sri Lanka (ICTA)

NAME OF THE PROJECT : Contingent Emergency Response Component (CERC) Projects Under the Climate Smart Irrigated Agriculture Project -P163742

SECTOR : Information and Communications Technology (ICT)

CONTRACT TYPE : Individual Consultancy Contract

DURATION OF ASSIGNMENT : One Year - Renewable yearly basis beyond 1st year financed by the Government of Sri Lanka (GOSL))

DUTY STATION : ICTA, Colombo

CONTRACT REFERENCE NO : LK-ICTA-246589-CS-INDV

DEADLINE FOR RECEIVING APPLICATION: 1500 hrs on September 20, 2021

Background

Based on the WHO's global Pandemic declaration and the widespread impacts of COVID-19, the Government of Sri Lanka requested the World Bank's assistance to activate the Contingent Emergency Response Components (CERC) for a total amount of US\$56 million to mitigate the impacts of the pandemic in Sri Lanka. Under the CERC, activities to facilitate Government for a Home-based Work Platform will be implemented by the Information and Communication Technology Agency (ICTA), in coordination with the Ministry of Finance and other relevant ministries.

Lanka Government Cloud (LGC) is one of the main government owned digital infrastructure established to facilitate all hosting requirements of the digital journey of GoSL. LGC consists of two versions which were established in two phases, LGC 1.0 and LGC 2.0. Currently, the LGC 2.0 operates without any backup or cloud native High Availability (HA) functionalities which are mandatory to such a critical government cloud infrastructure. Though the ICTA was determined the importance of having a 2nd zone for back up and high availability from the inception. Therefore, ICTA has obtained approvals for Lanka Government Cloud 2.0, site-2 will be implemented to cater all the backing up redundancy of network resources of the primary zone of LGC 2.0.

ICTA is now seeking an individual consultant/system engineer to facilitate initiatives that are focused on managing operations / administration of the Infrastructure of Lanka Government Cloud 2.0 site 2 under CERC projects.

Purpose and Scope of Assignment

The Individual Consultant/System Engineer is required to engage and facilitate initiatives focused on Implementation, management and support and maintenance of the Lanka Government Cloud (LGC) under the CERC project. The main objective of this assignment is to provide assistance to

the existing LGC 2.0 technical team and ensure the smooth operations and administration of the Infrastructure of Lanka Government Cloud, including the disaster recovery site.

Duties and Responsibilities

The System Engineers would:

- Ensure coordination between beneficiaries/users, project management teams, vendors, all stakeholders to implement and operate LGC 2.0 site 2.

More specifically,

- Engage in coordination and facilitation of project activities, operations and administration of Lanka Government Cloud.
- Provide 2nd and 3rd level support as specified below;
 - 2nd level support - In-depth technical support such as LGC administration tasks, instance issues, network issues, volume issues, openstack network issues and quota allocation issues.
 - 3rd level support - Consultation, Expert solution and support service and Root Cause Analysis including the performance monitoring of the LGC.
- Liaise with vendors and other IT personnel for problem resolution.
- Manage the network and monitoring of all installed systems and infrastructure.
- Take preventive and corrective actions as and when required
- Liaise with vendors and other IT personnel for problem resolution.

Required Outputs

- Timely implementation of LGC site 2.0 site 2.
- Coordination across Digital services and Technology teams for smooth operations support and management, service provisioning of Lanka Government Cloud.
- Operation and Maintenance of the LGC 2.0 according to the Service Level Agreement (SLAs) with support partners.
- Produce monthly progress reports on implementation progress of activities on regular reports.

Liaison and Reporting Requirements

The selected individual consultant/system engineer will report directly to the director of infrastructure services and other designated officer and will work closely with Project Managers, heads of government organizations, beneficiaries, vendors and other related Stakeholders.

Monitoring and progress measurements

Relevant Monitoring templates will be given by ICTA. The System Engineers is expected to fill all these documents on time and submit to ICTA. At the end of the contract, he/she will submit a final report on work undertaken which will include recommendations for future work necessary to strengthen project and operational work activity reform.

Qualifications of the System Engineer

- Bachelor's Degree in Computer Science, Electronics, Telecommunication, Network Engineering, or equivalent qualification related to the field from a recognized university / institution.

- At least 3 years of relevant professional experience.
- Linux systems administration skills.
- Hands on experience with routing, networking, VLANs, VoIP, firewalls and switching.
- Excellent problem-solving skills and ability to troubleshoot complex problems under pressure.
- Experience with RedHat OpenStack technologies will be an added advantage.
- Experience with Kubernetes, Docker and CI/CD will also be an added advantage.
- Experience with configuration management tools like Ansible, Chet and Puppet.
- Demonstrated experience authoring and automating tasks using scripting technologies like Perl, BASH, Python, TCL/TK, Ruby.

Key Competencies

- Good communication (verbal and written) and strong interpersonal skills and ability to work in a team
- Troubleshooting and issues-handling skills related to the network & cloud services
- Be results oriented and able to meet strict timelines for outputs and be self-motivated.
- Excellent Public relations (PR) Skills and good analytical skills.
- Good coordination and operational supporting skills.

Experience on the following fields will be an added advantage,

- Preferential certifications such as Redhat certified Engineer.
- Documentation and Reporting.
- Manage network security, backup and redundancy strategies.

Contract Arrangements

- The assignment period will be for a period of 12 months full-time basis and renewable on yearly.
- Beyond 1st year financed will be funded by the Government of Sri Lanka (GOSL)
- Payment will be made on a monthly basis.