ASYCUDA World Project: Hardware and Software

LOT 1.0 - Security and Networking Hardware

**LOT 1.0 - Security and Networking Hardware Proposal Requirements:**

* 1. **Experience:** The Proposer should provide approach and reference of successful implementation of similar system and should include descriptions of system implementations they have completed. The mentioned project references must include names and contact information of the respective clients so that MCS can contact and verify the project summaries.
  2. Bidder that does not manufacture or produce the Goods it offers to supply must submit the **Manufacturer’s Authorization Letter**, to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Republic of Maldives. Manufacture authorization letter must be referred to the tender advertisement.
  3. **Team Composition:** It is mandatory that the proposer maintain the required technical team as deemed as suited based on the requirements and milestones. Importantly it is expected that the Proposer will maintain necessary resources on-site during crucial stages of the Project that requires closer interaction with MCS during installation, configuration, integration, training, testing, etc. The proposer MUST have at least **one** full time Cisco professional under its payroll. The proposer shall submit the following documents.
     + Certification copy of the relevant training
     + Letter from organization that the engineer is employed at that organization
     + ID card OR Passport Copy of the engineer
     + Contact information of the staff and his/her supervisor in that organization

**Scope of Work:**

The Bidders must thoroughly understand the business requirements that will be supported before the migration to the Cisco solution. To assess these business requirements, the following topics should be addressed as the first step in the migration process.

**Management**

How will the environment be managed? Considerations should be made based on the MCS’s preferences for management of the migration. Limited downtime would be allowed and prior approvals are required for such cases.

Prior to the deployment of the new hardware, it is important to understand the configuration conversions that must be addressed. Bidder must analyse the existing network for the configurations, denied traffic and permitted traffic before migration. Audited report must be provided prior to migration process.

1. **Planning and Information Gathering**
   * + Perform site readiness assessment ensuring hardware and environment is ready for project commencement.
     + Perform requirement gathering and final design sessions in preparation for writing deployment process guides.
     + Provide recommendations in a written report format for appropriate versions of major software/firmware for MCS consideration and approval
2. **Switches & Firewall Installation**
   * + Rack and configure the switches and Firewalls
     + Configure uplinks and downlinks to the SAN and the LAN. (Details provided upon award)
     + Configure the firewall policies, WAN connectivity, routes and HA configuration.
     + Determine and enable all necessary and appropriate features and configurations such as, Link Aggregation Control Protocol (LACP), and Secure Shell (SSH).
     + Configure VLANs in accordance with the proposed new infrastructure layouts and requirements (to be provided upon award).
     + Provide documentation that fully describes configurations of the switches and Firewalls; providing all necessary information to restore configurations if lost.
3. **Management Server and Software Installation**
   * + Perform the physical installation, cabling, and labeling of the management server.
     + Identify the equipment to be monitored and credentials for the equipment.
     + Install virtualized VMware Software.
     + Determine where monitoring should be deployed and what network it should be placed on based on network information provided by MCS upon award.
     + Provide an overview of core features of the monitoring software and show they are working properly by demonstrating it on demo cases.

**Failover Policy**

Bidder must investigate the current policy to determine the requirements for failover after migration.

* + Perform failure testing within the system and provide a report of the results.
  + Document the results of the testing providing (if applicable) thorough descriptions of any rules, exceptions, or specific issues which are preventing failover.

After assessing the business needs, converting the firewall configurations, and reviewing the network considerations, the next requirement in the migration involves the development of the detailed network diagram.

**Network Drawing**

All teams—application staff, security staff, routing and switching staff, and outside partners—need a common reference from which to operate. This drawing should be attached to the proactive TAC case to be opened in the event of a critical implementation issue in future. Hence, the detailed network topology diagram should be updated and the configs must be documented before sign-off.

* + Physical Information - Including rack diagrams documenting ports, wiring, and connections.
  + Logical Network – Including names, IP addresses, Firewalls, Transmission Control Protocol (TCP) /IP Ports.
  + Provide documented procedures followed during setup of all equipment. Documents should be specifically related to the installations performed for MCS. Documentation should be sufficiently thorough for Maldives Customs Service to reproduce and replicate equipment setup if necessary.

**Service Level Expectations for Equipment**

The Bidder will offer warranty for the hardware against defects arising out of faulty design, materials and workmanship for a period of: One (1) years from the Date of Acceptance of the entire hardware.

1. Defective equipment shall be replaced by the Bidder at his own cost, including the cost of transport if any.
2. The Bidder shall provide all normal toolkit and test equipment needed for the maintenance of the hardware to the engineer.
3. System Maintenance & Support services will include the following activities.
   * 24 x 7 online support
   * Patch updating and major / minor software version upgrading support.
   * Issue resolution / Onsite Visits within 2 hrs. For hardware failures reported.
   * Phone/Email TAC and RMA support must be provided directly from Cisco.
   * SMARTnet support and service must be provided for all security and networking hardware/software.
   * Local TAC support plan must be maintained by the Bidder for the warranty period.

**Warranty**

The Successful Bidder must provide a warranty that the solution (software, hardware, etc) provided under the contract will comply strictly with the contract, shall be genuine in every particular case and shall be free from defects. The Successful Bidder further warrants to Maldives Customs Service that all materials, equipment and supplies furnished by the vendor will be new, merchantable of the most suitable grade and fit for their intended purposes.

The warranty period, shall be as given in the bid proposal and/or otherwise agreed in conditions of contract between Maldives Customs Service and the Successful Bidder. Additionally the Successful Bidder further warrants that all materials and equipment furnished are supplied from authorized channels. Maldives Customs Service reserves the right to reject the goods if it is identified as grey market products or counterfeit equipment.

LOT 2.0 – Site to Site Connectivity Upgrade

**LOT 2.0 - Connectivity from Site to Site Proposal Requirements:**

1. **Experience:** The Proposer should provide approach and reference of successful implementation of similar system and should include descriptions of system implementations they have completed. The mentioned project references must include names and contact information of the respective clients so that MCS can contact and verify the project summaries.

**Scope of Work:**

The Bidders must supply and install all the equipment, materials and labour for completing the project.

* Wireless Broadband – Installation of the Radio Access Points at the desired sites and connectivity must be configured by the bidder. Laying of the cables from the local network to the APs must be done by the bidder at their own cost. Bidders are advised to do the site survey prior to bid submission. The required tower and poles are already installed at the sites; hence only the mounting and cabling of the APs are required by the bidder. Power Connectivity to the APs must be analyzed during the site survey and the appropriate power connectivity must be installed.
* Wireless Coverage – Installation and configuration of the wireless access points at headquarters. Bidder must provide labor, materials and equipment for ceiling/wall mounting the access point. The wireless controller must be installed in the datacenter, and the necessary software must be installed and demonstrated to the IT staff of MCS. The bidder must configure the APs to provide automatic hand-over function from the APs.

**Service Level Expectations for Equipment**

The Bidder will offer warranty for the hardware against defects arising out of faulty design, materials and workmanship for a period of: One (1) years from the Date of Acceptance of the entire hardware.

1. Defective equipment shall be replaced by the Bidder at his own cost, including the cost of transport if any.
2. The Bidder shall provide all normal toolkit and test equipment needed for the maintenance of the hardware to the engineer.
3. System Maintenance & Support services will include the following activities.
   * Issue resolution / Onsite Visits within 2 hrs. For hardware failures reported.
   * Phone/Email TAC and maintenance support must be provided locally
   * Local TAC support plan must be maintained by the Bidder for the warranty period.

LOT 3.0 - Datacenter Maintenance and Upgrade Works

**Scope of Work:**

The Bidders must thoroughly understand the business requirements that will be supported before the migration to the Cisco solution. To assess these business requirements, the following topics should be addressed as the first step in the migration process.

**Management**

How will the environment be managed? Considerations should be made based on the MCS’s preferences for management of the upgrades. Limited downtime would be allowed and prior approvals are required for such cases.

Prior to the deployment of the new hardware and upgrades, it is important to understand the current setup of the infrastructure that must be addressed. Bidder must analyse the existing network for the downtime of the services during the maintenance and upgrade works.

1. **Maintenance and Upgrades**

* Inspect the current power infrastructure with qualified engineer.
* Upgrade the Power Panel for High Availability and to the standard to fit the national regulations for commercial buildings
* Installation of power control wiring and upgrading the current UPS APC Symmetra LX 8kVA Scalable to 16kVA with two additional battery modules and LX 4KVA Power Module.
* Upgrade the existing APC/DELL UPS with management network cards and repair the faulty UPS by replacing the CSB sealed lead battery.
* Installation of the Memory Kit into the blade servers and commissioning.
* Installation of the filler panels, APC PDU, loop straps, hooks, cable management kits and patch panels to the existing HP 11642 1075mm Shock Rack APC NetShelter SX 42U.
* Removing the existing floor mount racks and replaces the racks with the proposed 6U racks. APC basic rack PDU, the APC rack UPS, ODF and the cabling must be installed by the successful bidder.
* Installation and remounting the rack and the network points in the datacenter with cable management kits and termination. Mounting the patch panels and ODFs must be done by the successful bidder with their own resources and materials to bring the site to running condition.
* Network monitoring software must be installed on the designated server and must identify the necessary devices to be monitored. Successful bidder must provide the details of reporting and monitoring functions of the monitoring software.
* VMware Essentials Kit must be installed on the designated server to configure the necessary monitoring and maintenance software.

**Service Level Expectations for Equipment**

The Bidder will offer warranty for the hardware against defects arising out of faulty design, materials and workmanship for a period of: One (1) years from the Date of Acceptance of the entire hardware.

1. Defective equipment shall be replaced by the Bidder at his own cost, including the cost of transport if any.
2. The Bidder shall provide all normal toolkit and test equipment needed for the maintenance of the hardware to the engineer.
3. System Maintenance & Support services will include the following activities.
   * Issue resolution / Onsite Visits within 2 hrs. For hardware failures reported.
   * Phone/Email TAC and maintenance support must be provided locally
   * Local TAC support plan must be maintained by the Bidder for the warranty period.

LOT 4.0 - Microsoft Windows Server License

**LOT 4.0 - Microsoft Windows Server License Proposal Requirements:**

* 1. **Experience:** The Proposer should provide approach and reference of successful implementation of similar system and should include descriptions of system implementations they have completed. The mentioned project references must include names and contact information of the respective clients so that MCS can contact and verify the project summaries.
  2. Bidder that does not manufacture or produce the Goods it offers to supply shall submit the **Manufacturer’s Authorization Letter**, to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Republic of Maldives. MAF must be referred to the tender advertisement.
  3. **Team Composition:** It is mandatory that the proposer will maintain the required technical team as deemed as suited based on the requirements and milestones. However MCS expects that the proposer would have allocated the following more team compositions having specific skill sets and professional experience. Importantly it is expected that the Proposer will maintain necessary resources on-site during crucial stages of the Project that requires closer interaction with MCS during installation, configuration, integration, training, testing, etc. The proposer MUST have at least **one** full time Microsoft professional under its payroll. The proposer shall submit the following documents.
     + Certification copy of the relevant training
     + Letter from organization that the engineer is employed at that organization
     + ID card OR Passport Copy of the engineer
     + Contact information of the staff and his/her supervisor in that organization

**Scope of Work:**

The Bidders must install and configure the licenses in Maldives Customs Services Microsoft licensing portal for as required.