



Ministry of Digital Economy and Entrepreneurship  
(MoDEE)

**Request for Proposals (RFP)**  
**Data Center Upgrade for Social Security Corporation**

**Proposals Deadline: 27/7/2022**

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**DISCLAIMER**

THIS DOCUMENT IS A REQUEST FOR PROPOSAL (RFP) AND SHALL NOT BE CONSTRUED IN WHOLE OR PART AS A DIRECT OR INDIRECT ORDER. THE INFORMATION IN THIS RFP IS INTENDED TO ENABLE A COMPANY TO FORMULATE A PROPOSAL IN RESPONSE TO THE PROJECT REQUIREMENTS SET FORTH. ALTHOUGH THIS RFP CONTAINS SUCH ENABLING INFORMATION, BIDDERS MUST MAKE THEIR OWN INDEPENDENT ASSESSMENTS AND INVESTIGATIONS REGARDING THE SUBJECT MATTER OF THIS RFP. MODEE DOES NOT GUARANTEE THE ACCURACY, RELIABILITY, CORRECTNESS OR COMPLETENESS OF THE INFORMATION IN THIS RFP. THE BIDDER REMAINS RESPONSIBLE IN RELATION TO IDENTIFYING ANY FURTHER INFORMATION THAT IT REQUIRES TO PREPARE THE PROPOSAL.

# 1. Introduction

## 1.1. *RFP Purpose*

The Ministry of Digital Economy and Entrepreneurship (Modee) is soliciting proposals from qualified bidders (alone or having joint venture agreement) for providing, installing, connecting, configuring and testing hyper-converged infrastructure (HCI), Rack servers, SAN Storages, and Backup solution for Social Security Corporation.

In addition to that, providing the warranty, maintenance and support services (local and mother company) for the hardware and software for 3 years starting from the project preliminary acceptance.

The winning bidder will be responsible for successful delivery of the project within the timeframe and has to follow agreed tasks and achieve desired goals and requirements so that the project managed efficiently and effectively.

Responses to this Request for Proposal (RFP) must conform to the procedures, format and content requirements outlined in this document. Deviation may be grounds for disqualification.

## 1.2. *RFP Organization*

This RFP document provides the information needed to enable bidders to submit written proposals for the sought solutions. The organization of the RFP is as follows:

### **Section 1: Introduction**

This section outlines the RFPs purpose and its organization.

### **Section 2: Current Environment Overview**

This section describes the current environment specification of SSC data centers.

**Section 3: Scope of work and deliverables**

This section describes the requirements, scope of work, and deliverables for the required services presented in this RFP.

**Section 4: Solution Specifications**

This section describes the administrative rules and procedures that guide the proposal and its processes.

**Section 5: Administrative Procedures and Requirements**

This section describes the administrative rules and procedures that guide the proposal and its processes.

**Section 6: BOQ**

**Section 7: Annexes**

## 2. Current Environment Overview

- Social Security Corporation has two (2) Data Centers:
  1. Main Site (DC Site).
  2. Online Backup Site (HA Site)
  
- These sites are equipped with HP equipment including:

- HP Blade Servers.
  - HP Standalone Servers.
  - HP Store Once.
  - HP Tape Library.
  - HP 3PARStoreServ.
  - HP Data Protector.
  - HP TFT7600 KVM.
  - HP Blade Servers Enclosures.
- The virtual environment in SSC all sites are built on Microsoft Windows Server 2012R2 Hyper-V as a hypervisor.
  - The Virtual environment in SSC is composed of 6 blade servers on the main site and 3 blade servers on the HA site.
  - A list of current Services & VMs in detail is listed in annex (7.5).

### 3. Scope of Work and Deliverables

#### **Important Notes:**

- There are certain activities to be performed and deliverables to be provided by winning bidder during execution of the Project. More detailed information on each of them is given in the next paragraphs.
- The winning bidder shall provide such Hardware ,software, professional services, deliverables, support and warranty. The cost of these requirements or activities should be included in the fixed lump sum price submitted by the winning bidder
- Final deliverables submitted by the winning bidder should be attached to an original official letter properly bounded, stamped and signed by the winning bidder as shall be defined and approved by SSC.
- Interested bidders may conduct a site visit to SSC to assess current situation. MODEE will be responsible of arranging and facilitating this visit prior to proposal submission
- The duration time for the project will be 180 calendar days starting from the commencement date. In addition to 3 years support and maintenance services for the new hardware and Software.
- Bidders must include the below in their financial proposals:
  - Equipment Delivery to their final locations in Main and HA sites.
  - Equipment Delivery to branches (20 sites) – some of them are within Amman and some are out of Amman – list of branches within scope is in annex 7.6 of this RFP.
  - All needed licenses (except for Oracle Licenses).

- All needed equipment and components required for the proper functionality of the proposed solution.
- Bidder should abide to all terms of SLA agreement in Annex 7.4
- Winning bidder should provide any additional requirements needed for the proper delivering of the project and its cost should be included in the price submitted by the bidder.
- Below activities are out of the project scope and will be provided by SSC team:
  - OS installation on the new Oracle Servers.
  - Oracle Applications and Databases migration from the old servers to the new servers.
  - Oracle Licenses.
- HCI, SAN Storage, Oracle Servers, Domain Controllers Servers, and Remote offices Servers must be from the same vendor. 3<sup>rd</sup> Party solutions are accepted on other components.

### **General Features**

- The company must provide HCI Physical node. These nodes must combine virtualization, compute, storage, management, and data protection with a single point of support for the hardware and software.
- HCI nodes must come from the factory with the hypervisor preloaded, to minimize launch times.
- HCI nodes must deliver resiliency and centralized management functionality.
- HCI nodes must provide deduplication & compression.
- HCI nodes must support Erasure Coding data protection or equivalent on all-flash node configurations. Any RAID5 like technology is accepted.
- The HCI nodes must be based on the All-Flash Storage configuration.
- The HCI nodes must automatically discover and non-disruptively add each new node and rebalances resources and workloads across the cluster.
- The HCI nodes must run VMware vSphere Hypervisor which should be built on the proven technologies that are optimized for new users as well as for experienced administrators.
- Replication (local & remote) and advanced disaster recovery capabilities must be included from day one and integrated with the solution. Continuous data protection for VMs to the minimum possible RPO, any point in time recovery, and WAN bandwidth significant reduction, 3rd party software is accepted.
- The ability to replicate VMs in groups with the same timestamp to ensure a successful recovery and the solution needs to orchestrate the sequence of VMs loading in the DR within a specific group, to provide proper DR orchestration. 3rd party solutions are accepted.
- Bidder is required to identify any extra resources/equipment/works loads required for the fully successful implementation of the project.

### **Winning Bidder Activities**



For the proper completion of the Project, the winning bidder is required to perform the activities mentioned below. The winning bidder should provide any additional related activities needed for the proper fulfillment of the project and its cost should be included in the price submitted by the bidder.

- Deliver, install, configure, operate, and test all components (Hardware/software) at both datacenter and HA sites, as per the BoQ mentioned in section 4: Solution Specification.
- Install, first patch, and update for Operating systems-latest version (or previous versions if required by SSC) on all physical servers except Oracle rack servers.
- Perform all required configurations to Build a fully integrated solution between the Datacenter and the HA sites.
- Build the required Clustering (HA) whenever needed on the provided servers.
- Build the required configuration between the provided SAN systems for asynchronous or synchronous (real-time) replication, Failover, and failback (for Oracle SAN storage).
- Build and configure backup schedule as SSC backup policy and needs on both backup to disk and backup to tape systems.
- Convert the old management physical server into a virtual machine on the new environment.
- Migrate of all existing Hyper-V VMs into the new hypervisor solution (VMware).
- Install and configure of all software packages delivered through this bid.
- Install and configure of VMware latest version on all provided HCI Nodes.
- Suggest and implement the scenario for failover and failback according to best practices between the Datacenter and HA sites for SSC services.
- Provide **Detailed** Documentation of the provided solution (including Topology in each site, Topology between 2 sites, IP schema, usage of service accounts, Clusters, configuration on all components, Operating systems, VMs documentation, Failover procedures, Failover & Failback Procedures, etc.).
- Provide all required accessories to successfully operate the solution (patch cords-PDUs, industrial power sockets, etc.).
- Install all provided components inside the SSC containment system (vericom).
- Perform safe testing for failover and failback processes on selected VMs before migrating the production VMs. This test must be done in a safe way in which no data is lost during the test. The test must be done during non-working hours at any time selected by SSC.
- Provide Professional Training and on-site knowledge transfer (detailed in below sections).
- Disassembly (Physical De-installation) of retired components and Cabinets. This is to be done upon SSC request in any phase during the project or even after completing the implementation of the whole project during the warranty period. And must be done safely and professionally so services are not interrupted.
- Provide a FULL Disaster Recovery Plan (DR Plan) detailing all procedures steps & tasks to be done to have the (HA) Site fully operational and active in case of disaster at the main site.
- Provide All accessories and Cables required to operate the solution.
- Provide proper labeling for all components included in this project after the full installation.
- Provide licenses, warranty and maintenance for 3 years for all provided HW and SW items listed in the BOQ, starting from the date of preliminary acceptance.

- Handle all project management activities needed for the successful implementation and delivery of the monitoring solution.
- Below activities are out of the tender scope:
  - OS installation on the new Oracle Servers.
  - Oracle Applications and Databases migration from the old servers to the new servers.
  - Oracle Licenses.

## 4. Solution specification

Below is the list of specifications and capabilities that should be provided by the proposed Solution unless stated otherwise, bidder must provide details of the proposed features and specifications where needed.

❖ **NOTE: Below specifications are the minimum accepted spec. Equivalent or higher specs are accepted as well**

### 4.1. HCI Solution

#### 4.1.1. Hyper Converged Infrastructure Specs

HCI Specs (Main Site)		QTY (1 Unit)	
Item	Description	Comply	Notes
<b>Availability Design inside the site</b>	The main site should have an (N+1) design with a minimum of (5) Nodes, please send us the design and how (N+1) is implemented.		
<b>Compute</b>	Dual Intel® Xeon® Gold , 2.2GHz, 32C/64T per node		
<b>DRAM</b>	5TB of DRAM for the site useable , should be configured using intel’s best practices.		
<b>Storage Capacity</b>	A minimum of 153TB of RAW SSD per cluster Storage before Compression and Deduplication and before Replication factor (however Raid5 or 6 or equivalent to be applied after). Excluding cache tier, which is (2x cache disks per nodes).		

HCI Specs (Main Site)		QTY (1 Unit)	
Item	Description	Comply	Notes
Available disk bays for future expansion (per node)	12 bays		
RAID Support	Raid5 or 6 or equivalent must be implemented at the site.		
Network Cards (Per Node)	<ul style="list-style-type: none"> <li>Minimum of 4x10G SFP+ ports loaded with Short-range SFPs.</li> <li>2X25 Gbps Network Cards to connect to Cisco ACI environment</li> </ul>		
VMware vSphere ENT+ licenses	To be provided for all provided CPU cores.		
VMware vCenter Standard	1 per site.		
Log Management	VMware Log insight for centralized log management. To cover the entire site. (Per socket license).		
Support	3 Years 24x7 support on the entire stack from mother company.		

HCI Specs (HA Site)		QTY (1 Unit)	
Item	Description	Comply	Notes
Availability Design inside the site	<p>The main site should have a design with a minimum of (4) Nodes,.</p> <p>Design should be included in technical proposal</p>		

HCI Specs (HA Site)		QTY (1 Unit)	
Item	Description	Comply	Notes
<b>Compute</b>	Dual Intel® Xeon® Gold 2.2Ghz, 32C/64T, (each node)		
<b>DRAM</b>	4TB of DRAM for the site.		
<b>Storage Capacity</b>	A minimum of 120TB of RAW SSD Storage per cluster before Compression and Deduplication and before the Replication factor (however Raid5,6 or equivalent to be applied). Excluding cache tier, which is (2x cache disks per nodes).		
<b>Available disk bays for future expansion (per node)</b>	12 bays		
<b>RAID Support</b>	Raid5,6 or equivalent must be implemented at the site.		
<b>Network Cards (Per Node)</b>	<ul style="list-style-type: none"> <li>• Minimum of 4x10G SFP+ ports loaded with Short-range SFPs.</li> <li>• 2X25 Gbps Network Card to connect to Cisco ACI environment</li> </ul>		
<b>VMware vSphere ENT+ licenses</b>	To be provided for all provided CPU cores.		
<b>VMware vCenter Standard</b>	1 per site.		
<b>Log Management</b>	VMware Log insight for centralized log management. To cover the entire site. (Per socket license).		
<b>Support</b>	3 Years 24x7 support on the entire stack from mother company		

4.1.2. Inter-site and Intra-Site Replication Software:

Replication Software Notes	Comply	Notes
The solution should include continuous data protection for workloads (Local and Remote).		
The solution should be able to provide application-consistent point-in-time copies for workloads with optimal RPO/RTO.		
The solution should provide any point-in-time recovery where SSC can overcome all logical corruptions.		
The solution should reduce the WAN bandwidth consumption drastically and utilize available bandwidth optimally (3rd party is accepted) (WAN optimization).		
The solution should be able to replicate Virtual machines in groups for the full application stacks, to make sure all are being replicated with the right timestamps.		
The solution should be able to orchestrate the VM restoration at the HA site, to have an automated Disaster recovery process, where the solution can control the sequence of VMs being activated within the same replication group. (3rd party is accepted).		
The solution must cover all nodes And CPU Sockets on Main Site or to cover at least 100TB usable capacity		

4.1.3. Top of the Rack Networking Switches

TOR Switches	QTY 6	Comply	Notes
The switch must have 24 SFP+ ports capable of doing 1/10GE			
The switch must have 2 x QSFP28ports, capable of 40/100G for switch interconnection. Cables should be included.			
<p>The Switches will be as follows.</p> <ul style="list-style-type: none"> <li>a. Dual Redundant switches for HCI Solution and Backup Solution in Main Site each switch equipped with at least 21 SFP+ transceivers.</li> </ul>			

TOR Switches	QTY 6	Comply	Notes
<ul style="list-style-type: none"> <li>b. Dual Redundant switches for front end connectivity of oracle servers in main site each switch equipped with at least 14 SFP+ Transceivers.</li> <li>c. Dual Redundant switches for HCI, oracle servers, and Backup Appliance in HA site each switch equipped with at least 21 SFP+ Transceivers.</li> <li>d. Moreover, each switch will have 2x10GB uplinks towards the existing Core Switch.</li> <li>e. Uplink Transceivers from proposed switches to SSC Core switches will be 12 SFP+ Transceivers detailed: six as SR for Core 1 in the main building and six as LR for core 2 in the HA building.</li> <li>f. All SFP's Transceivers should be certified and proposed from the switch vendor.</li> </ul>			
The switch's backplane capacity must be 960Gbps at least.			
Forwarding capacity must not be lower than 720Mpps			
The proposed switch must have a redundant power supply.			
The switch must have Multi LAG or Multichassis LAG or similar protocol support to act as a single switch in Layer2 and Layer3 mode.			
The switch must support VXLAN			
The switch must have jumbo frame support.			
The switch must support Layer 3 routing and must be offered with its highest available licensing model.			
The switch must have IGMPv3 support.			
The switch must support sFlow or NetFlow.			
The switch must support Port Mirroring.			
The switch must have LLDP and LLDP-MED support.			
The switch must have IP multicast snooping and MLD snooping.			
The switch must be offered with the highest available licensing applied.			

Note: Any 3rd party solution for switches is accepted to achieve the above features.

#### 4.1.4. Management Switch Specifications

Management Switch Specs	QTY 2	Comply	Notes
24x RJ45 10/100/1000Mb auto-sensing ports, 2x SFP+ ports, 2x stacking ports, SFP+ transceivers included			
Forwarding rate:128 Mpps (86 Gbps) MAC addresses: 30K Static routes: 256 (IPv4)/128 (IPv6)			
Switch fabric capacity:128 Gbps minimum			
CPU memory: 1GB			
VLANs supported: 4,094			
802.1AB LLDP 802.1Q VLAN Tagging 802.1S Multiple Spanning Tree (MSTP) 802.1v Protocol-based VLANs			

#### 4.2. Backup Solution

Social Security Corporation will replace the Current Backup solution with a new more modern Data protection solution that can handle the new requirements of the Datacenter and infrastructure.

SSC has two Sites for data protection. The main site, with the backup Software and Hardware, will handle the backup process of the clients and A copy to be replicated to the HA Site where the Backup storage exists.

Due to the increase of Cyberattacks worldwide and the risk of the data core business, another layer of security will be added to the Data Protection Process.

##### 4.2.1. Backup to Disk Appliance Specifications:

- Note: Bidders are allowed to propose an architecture with full end-to-end backup platforms as software-defined and single tier, i.e. backup appliance with the backup

software/service within it instead of below multi-tier architecture (backup storage solution, backup servers)

Backup to Disk Appliance Specs	QTY 2	Comply	Notes
The backup system deduplication process must utilize small block sizes.			
The backup system must be fully compatible with leading Enterprise Backup Software and Archive applications (should not be locked to specific backup software).			
The backup system must simultaneously be configured as CIFS and NFS.			
The backup system must support 1 Gbps and 10 Gbps Ethernet interface connectivity.			
The backup system must support Ethernet failover, Ethernet aggregation, and VLAN tagging.			
The backup system must support an internal mechanism to provide the best defense against (software and hardware) data integrity issues to continuously verify, detect and protect against data recoverability issues throughout the life cycle of the backup data.			
Backup system must support source de-duplication processing			
The Backup system must support tape-out.			
The backup system must support Retention Lock capabilities for Archive requirements.			
The backup system must support Snapshot features to make a read-only copy of the backup Images for protection.			



Backup to Disk Appliance Specs	QTY 2	Comply	Notes
The backup system must provide high availability architecture including N+1 power supplies and fans and Dual disk parity RAID6 with Spare for each group <b>or</b> modern software-based disk/nodes availability technologies like Erasure coding.			
The backup system must provide network-efficient, automated, ultra-safe replication for disaster recovery (DR), remote office data protection, and multi-site tape consolidation.			
The backup system must support folder-level replication, support bi-directional, One-to-Many, and cascaded replication between systems.			
The backup system must support the management of replication at the backup software level.			
The backup system must include Web/Browser-based Management GUI.			
The backup system must support inline data-at-rest encryption.			
The backup system must support at least a 27 TB/h ingest rate regardless of the deduplication factor.			
The backup system must support secure encrypted replication between appliances with all licenses must be provided from day 1			
The proposed Backup system solution must have at least <b>45 TB</b> usable capacity in (Main Site) and another <b>45 TB</b> usable capacity in (HA Site) before compression and deduplication, after calculating RAID and Spare capacity as per the vendor best practices.			
The proposed backup must be scalable to at least <b>170 TB</b> usable capacity, before compression and deduplication, after calculating RAID (or Erasure			

Backup to Disk Appliance Specs	QTY 2	Comply	Notes
coding) and Spare capacity as per the vendor best practices.			
The proposed Backup system should include Replication License, and NTFS/CIFS License.			

4.2.2. Backup Software Specifications:

Backup Software QTY 1	Comply	Notes
Centralized management and reporting for both the software and the dedicated backup appliance/appliances.		
Protect and recover virtual environments including VMware (VMWare API for Data Protection and VMWare Change Block Tracking for backup and restore), <u>in addition to backup new oracle environment.</u>		
Backup software must integrate with VMware vSphere interface to run backup and restore tasks directly from vSphere GUI.		
Backup software must have the ability to catalog, index, and discover snaps not created previously by the backup software.		
Backup software must have the ability to replicate data to a remote site at a specific schedule.		
Backup software must have the ability to assign unique retention policies to the replicated data.		
Backup Software should support backup for existing NAS Storage (DELL EMC Isilon) using NDMP protocol as Isilon best practice or equivalent protocol with the same capabilities,		

<p>please include any additional Hardware required</p> <ul style="list-style-type: none"> <li>Capacity of existing NAS is 20 TB to be included in backup process with required Licenses.</li> </ul>		
<p>Bidder should propose NDMP (if applicable) accelerator Hardware node for network and performance optimization with minimum of two disks, two power supplies and 4 x 10GB SFP Ports.</p>		
<p>Backup software must support backup from Oracle DB and Application servers (proposed by this project). All needed Licenses must be provided to cover 1 TB FE Capacity.</p>		
<p>Backup Software must support granular recovery.</p>		
<p>Backup Software must provide the event-based backup capability to automate application protection driven by monitored events.</p>		
<p>Fast, reliable disaster recovery management.</p>		
<p>Ability to control the appliance-based replication from the same graphical user interface and keep track of the disaster recovery copies.</p>		

**4.2.3. Backup Software Licenses and Server Specifications:**

Backup Software	Comply	Notes
<p>Backup Software License to cover</p> <ul style="list-style-type: none"> <li>Front end Capacity of 1 Terabyte for oracle environment, please use vendor best practice for sizing smooth backup and recovery for oracle DB.</li> <li>And to cover all the sockets at the HCI system proposed by the vendor.</li> </ul>		

The license should include unlimited client, applications (i.e., MS SharePoint, MS Exchange), and database license (oracle, SQL, and MySQL).		
SSC will require Tape Library for Oracle DB Backup weekly schedule and tapes will be sent out of the main building. Bidders need to manage connecting their backup software in addition to the provided TL.		
Backup Server Hardware should be proposed as vendor best practices and recommendations based on SSC workloads and backup Window. Please use your best sizing Server or appliance and per SSC Connectivity. (10Gb SFP+ Ports), Bidder to specify the Number of Ports needed.		
The backup Index and database must be replicated to the HA site with the best practices.		
License should be covered with warranty and support for 3 years 24x7 from Mother Company		

4.2.4. Tape Library Specification

Tape Autoloader			QTY 1
Item	Description	Comply	Notes
Drive type	LTO-6, LTO-7, LTO-8		
Number of drives	1 half-height		
Number of cartridges	9		

Tape Autoloader			QTY 1
Item	Description	Comply	Notes
Media Supported	LTO-5, LTO-5 WORM LTO-6, LTO-6 WORM LTO-7 Type M, LTO-7, LTO-7 WORM LTO-8 LTO Ultrium Cleaning Cartridge 5 Media LTO 6 included.		
Media to be provided	LTO-8, QTY (20)		
Interface	6Gb SAS or FC		
Network interface	Ethernet RJ-45 Serial RJ-11 IPv6 Phase 1 & 2 Ready and DoD APL		
User interface	web-based administration		
Support	Mother company support for 3 years 24x7. (Parts & Labor).		

4.3. Cyber Recovery OR Equivalent Solution (Golden Image):

**Note:** Bidders are allowed to propose an architecture with full end-to-end platforms as software-defined solution and single tier, i.e. backup appliance with the backup software/service within it instead of below multi-tier architecture (backup storage solution, backup servers) but still need to comply with below features:

4.3.1. Cyber Recovery Solution Requirements:

CRS requirements	Comply	Notes
The solution must provide an isolated recovery backup copy totally isolated from the production network .		

CRS requirements	Comply	Notes
All Hardware and software components must be installed by a certified professional from the vendor itself (Mother Company).		
Hardware and Software must be compatible with the proposed solution.		
The solution must support creating multiple backup golden copies.		
Replication between the existing backup and the isolated site must be automated and must use the pull technique to pull the data from the main site.		
The solution must support the restore and validation workflow for the restored backup images.		
The manufacturer must provide protection on the services level.		
Provide a redundant switch device with 10Gbe base-T ports to connect the solution to the provided components.		
All Servers and hardware required should be supplied to run the solution in the isolated Site. In addition, an infrastructure server will run test servers for all SSC mission-critical applications. Infrastructure servers for isolated site Specifications are below.		
Provide consultancy services required to run the solution from the manufacturer (hardening, implementation, scripting, documentation, and final test).		
The solution includes the supply of all devices, programs, and licenses (Retention lock and encryption licenses) and does the work required to run.		
All hardware should be covered with 3 years warranty including HW and SW.		
Support and maintenance from the manufacturer for (three years) for all hardware and software Mission Critical support.		

CRS requirements	Comply	Notes
KVM switch to manage all the infrastructure in the isolated site should be proposed to cover the whole servers.		

➤ **Specifications for data analysis and disclosure of the possibility of the existence of files or data penetrated:**

Specifications	Comply	Notes
Must be integrated with the proposed Backup Software and Hardware.		
Must be able to analyze data over time and report unusual changes in the file with the ability to perform analysis such as entropy of files, individual pages in databases, similar to two file notes and file deletion detection, mismatch and/or file type mismatch, and corrupt / truncated files.		
<p>All points below are applied only to backup data:</p> <ul style="list-style-type: none"> <li>a. Provide reporting tools to detect disclaimers and attacks.</li> <li>b. Detects common attacks including encryption, ransom, destruction, and slow corruption.</li> <li>c. Direct indexing of content in backups without the need to recycle data, which may trigger ransom.</li> <li>d. No need for original backup software to restore another good file/database.</li> <li>e. Ability to scan images directly from a backup storage unit within an isolated environment.</li> </ul>		
<p>The solution should provide a pilot engine with a leading mechanism such as:</p> <ul style="list-style-type: none"> <li>a. Statistics looking at data for unusual behavior</li> <li>b. Machine learning to create a Yes / No indicator if an attack occurs.</li> </ul>		

<ul style="list-style-type: none"> <li>c. Engage forensic tools to find corrupt files, diagnose attack vectors.</li> <li>d. Help by providing the ability to recover the last good file to minimize business interruption.</li> </ul>		
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❖ **Minimum Hardware and Servers required in the isolated environment:**

4.3.2. Isolated Site Backup Appliance

Isolated Site Backup Appliance Specifications	Comply	Notes
The backup system deduplication process must utilize small block sizes.		
The backup system must be fully compatible with leading Enterprise Backup Software and Archive applications (should not be locked to specific backup software).		
The backup system must simultaneously be configured as a CIFS, and NFS.		
The backup system must support 1 Gbps and 10 Gbps Ethernet interface connectivity.		
The backup system must support Ethernet failover, Ethernet aggregation, and VLAN tagging.		
The backup system must support an internal mechanism to provide the best defense against data integrity issues to continuously verify, detect and protect against data recoverability issues throughout the life cycle of the backup data.		
Backup system must support source de-duplication processing.		
The backup system must support Retention Lock capabilities for Archive requirements.		



Isolated Site Backup Appliance Specifications	Comply	Notes
The backup system must support Snapshot features to make a read-only copy of the backup Images for protection.		
The backup system must provide high availability architecture including N+1 power supplies and fans and Dual disk parity RAID6 with Spare for each group, <b>or</b> modern software-based disk/nodes availability technologies like Erasure coding.		
The backup system must provide network-efficient, automated, ultra-safe replication for disaster recovery (DR), remote office data protection, and multi-site tape consolidation.		
The backup system must support folder-level replication, support bi-directional, One-to-Many, and cascaded replication between systems.		
The backup system must support the management of replication at the backup software level.		
The backup system must include Web/Browser-based Management GUI.		
The backup system must support inline data-at-rest encryption.		
The backup system must support at least a 27 TB/h ingest rate regardless of the deduplication factor.		
The backup system must support secure encrypted replication between appliances.		
The proposed Backup system solution must have at least <b>45 TB</b> usable capacity, before compression and deduplication, after calculating RAID and Spare capacity as per the vendor best practices.		
The proposed backup must be scalable to at least <b>170 TB</b> usable capacity, before compression and deduplication,		

Isolated Site Backup Appliance Specifications	Comply	Notes
after calculating RAID (or Erasure coding) and Spare capacity as per the vendor best practices.		
The proposed Backup system should include Replication License, and NTFS/CIFS License.		

4.3.3. Isolated Servers specs

Infrastructure Server (Test Server)		QTY 1	
Item	Description	Comply	Notes
Processor	2 x Intel® Xeon® Gold 5317 3G, 12C/24T, 11.2GT/s, 18M Cache		
Core Disable	The proposed Server should support Processors Core Disabling.		
Memory	12 x 16GB RDIMM, 3200MT/s, expandable up to 3TB		
Hard Drives (OS)	10 x 2.4TB 10K HDD		
OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Citrix Hypervisor, Oracle Linux 8. Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Redundant.		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		
Network	2 x 10GbE Base-T		
Management	Licenses Remote Control for hardware Management.		
Form Factor	Rack Mount with all the needed accessories to install in a Rack cabinet with all needed cables		

<b>Infrastructure Server (Test Server)</b>			<b>QTY 1</b>
<b>Item</b>	<b>Description</b>	<b>Comply</b>	<b>Notes</b>
Support and Warranty	Mother company support for 3 years. (Parts & Labor).		

<b>App Server (Analytical tools &amp; AI Server) <u>(If needed)</u></b>			<b>QTY 1</b>
<b>Item</b>	<b>Description</b>	<b>Comply</b>	<b>Notes</b>
Processor	2 x Intel® Xeon® Gold 5317 3G, 12C/24T, 11.2GT/s, 18M Cache		
Core Disable	The proposed Server should support Processors Core Disabling.		
Memory	12 x 32GB RDIMM, 3200MT/s, expandable up to 3TB		
Hard Drives (OS)	4 x 1.92 TB SSD SAS Read Intensive 12Gbps.		
OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Citrix Hypervisor, Oracle Linux 8. Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Redundant.		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		
Network	2 x 10GbE Base-T		
Management	Licenses Remote Control for hardware Management.		
Form Factor	Rack Mount with all the needed accessories to install in a Rack cabinet with all needed cables		
Support and Warranty	Mother company support for 3 years. (Parts & Labor).		

<b>Virtualized Server (MUST be provided)</b>		<b>QTY 1</b>	
<b>Item</b>	<b>Description</b>	<b>Comply</b>	<b>Notes</b>
Processor	2 x Intel® Xeon® Gold 5317 3G, 12C/24T, 11.2GT/s, 18M Cache		
Core Disable	The proposed Server should support Processors Core Disabling.		
Memory	12 x 16GB RDIMM, 3200MT/s, expandable up to 3TB		
Hard Drives (OS)	10 x 2.4 TB 10K SAS 12Gbps		
OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Citrix Hypervisor, Oracle Linux 8. Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Redundant.		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		
Network	2 x 10GbE Base-T		
Management	Full features License Remote Control for hardware Management.		
Form Factor	Rack Mount with all the needed accessories to install in a Rack cabinet with all needed cables		
Support and Warranty	Mother company support for 3 years. (Parts & Labor).		

4.3.4. Isolated Top of Rack Switches specs

Switch (Top of Rack switch/CRS switch) (2)	QTY	Comply	Notes
Switching Capacity: Minimum 960Gbps or higher.			
Throughput: Minimum 720 MBPS or higher.			
Ports: The switch must have a 24x10G base-T.			
The switch must have 2 x QSFP28 ports, Capable of 40/100G.			
The switch must support 100 K Mac addresses.			
The switch must support minimum of 180K IPv4 and 120K IPv6 routes in its routing table.			
The switch must support IEEE 802.1s Multiple-Instance Spanning Tree.			
The switch must support Layer 3 routing and must be offered with its highest available licensing model. The unit must support, OSPF, BGP in its minimum licensing model.			
The switch must have IGMPv3 support.			
<p>The switch must be classified as Data Centre Switch with the following features:</p> <ul style="list-style-type: none"> <li>• Data Centre Bridging (IEEE 802.1Qbb Priority Flow Control (PFC))</li> <li>• Data Centre Bridging</li> <li>• Must provide high performance with low latency</li> </ul> <p>Exchange (DCBX)</p>			
The switch must have Multi LAG or Multi chassis LAG or similar protocol support to act as a single switch in Layer2 and Layer3 mode.			
Licenses for all switch features must be included in the proposal (Must be activated from day zero).			
Support VLANs.			
Warranty: 3 Years Warranty local and mother company.			

#### 4.4.Oracle Hardware Solution

Bidders must propose a replacement for the existing oracle environment in Main and DR Bidders requested to offer servers and NextGen Enterprise Storage to replace the current SSC oracle Environment; all proposed servers must be Compatible to Run KVM Hypervisor and Oracle Linux Version that SSC is willing to upgrade to.

**Four** Servers for the **Main Site** for (2 for Oracle Database, 2 for Application) and **Four** Servers for the **HA Site** for (2 for Oracle Database, 2 for Application). In addition, Bidders are responsible to Offer all the Network Requirements for this setup. I.e. Redundant SAN Switches (main and HA) with the Speed and number of ports Requested in Specifications Table and required SFPs.

##### 4.4.1. Oracle Servers Specs:

Servers for Oracle DB and APP in the Main Site			QTY 4
Item	Description	Comply	Notes
Processor	Min 2 x Intel® Xeon® Gold 3.8 8C/16T,		
Core Disable	The proposed Server should support Processors Core Disabling.		
Memory	8 x 32 GB RDIMM, 3200MT/s, expandable up to 3TB Minimum.		
Hard Drives (OS)	2 x 480GB SSD.		
OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, KVM, Citrix Hypervisor, Oracle Linux 8. Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Redundant.		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		

Servers for Oracle DB and APP in the Main Site			QTY 4
Item	Description	Comply	Notes
Network & FC	4 x 10GbE SFP+ for front end connectivity with All SFP's 2 x 32Gb FC ports Fiber Channel HBA.		
Management	Full features License Remote Control for hardware Management.		
Form Factor	Rack Mount with all the needed accessories to install in a Rack cabinet with all needed cables		
Support and Warranty	Mother company 24x7 support for 3 years. (Parts & Labor).		

Servers for oracle DB and APP in the HA Site			QTY 4
Item	Description	Comply	Notes
Processor	Min 2 x Intel® Xeon® Gold 3.8 8C/16T,		
Core Disable	The proposed Server should support Processors Core Disabling.		
Memory	8 x 32 GB RDIMM, 3200MT/s, expandable up to 3TB Minimum.		
Hard Drives (OS)	2 x 480GB SSD.		
OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Citrix Hypervisor, Oracle Linux 8. Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Redundant.		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		

Servers for oracle DB and APP in the HA Site			QTY 4
Item	Description	Comply	Notes
Network & FC	4 x 10GbE SFP+ for front end connectivity with all SFP's  2 x 32Gb FC ports Fiber Channel HBA.		
Management	Full features License Remote Control for hardware Management.		
Form Factor	Rack Mount with all the needed accessories to install in a Rack cabinet with all needed cables		
Support and Warranty	Mother company support for 3 years. (Parts & Labor).		

4.4.2. Oracle SAN Storage Specs:

Next-Gen Enterprise Storage			QTY 2
Item	Description	Comply	Notes
<b>Industry Recognition</b>	<ul style="list-style-type: none"> <li>Must be supplied by the same server vendor as HCI and Oracle servers to provide a single point of support</li> </ul>		
<b>General</b>	<ul style="list-style-type: none"> <li>The proposed Storage solution must be based on Enterprise All-Flash NVMe.</li> <li>The specs shown below represent the minimum for the proposed array. Entry-level models are not acceptable.</li> </ul>		
<b>Storage Architecture</b>	<ul style="list-style-type: none"> <li>The Proposed Storage must be based on Enterprise-Grade All-Flash Array based on the below:</li> </ul>		



<b>Next-Gen Enterprise Storage</b>	<b>QTY 2</b>
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Item	Description	Comply	Notes
	<ul style="list-style-type: none"> <li>• Scales-Up AND scale-out via federated architecture with different models within the family that let you expand capacity and performance independently.</li> <li>• Ability to expand the capacity of the storage by adding a single disk to existing disks each time.</li> <li>• 32G Fiber channel modules for storage to host connection through SAN switches</li> <li>• NVMe architecture.</li> <li>• Storage Array must be dual redundant controllers.</li> <li>• Should support online data mobility and workload balancing in the cluster.</li> <li>• The storage must include the licenses to support the maximum number of disks and Capacity on the provided shelves.</li> <li>• The storage must include the licenses to connect to the maximum number of hosts supported by the storage.</li> </ul>		
<b>Required Storage Capacity</b>	<ul style="list-style-type: none"> <li>• Minimum 10 TB Usable capacity ready to use, using high-speed NVMe Drives expandable. Before compression and deduplication. After calculating RAID and Spare capacity as per the vendor best practices, provide a Capacity calculation. Consider RAID 6 for Protection.</li> </ul>		
<b>Controller</b>	<ul style="list-style-type: none"> <li>• The Proposed Array should be configured with at least two</li> </ul>		

Next-Gen Enterprise Storage			QTY 2
Item	Description	Comply	Notes
	<p>redundant controllers with redundant interconnectivity.</p> <ul style="list-style-type: none"> <li>The proposed storage Solution must have a minimum of 24 Cores per array.</li> </ul>		
<b>Front End &amp; Backend Connectivity ports</b>	<p>The Proposed Storage solution must be configured with at least: -</p> <ul style="list-style-type: none"> <li>Minimum of 4x FC per controller front-end ports running at 32 GB port speed.</li> <li>Minimum 4 x 10G SFP+ per controller Ethernet for iSCSi connectivity.</li> </ul>		
<b>Cache</b>	<p>The Proposed Storage solution should be configured with: -</p> <ul style="list-style-type: none"> <li>System memory of at least 192 GB total protected read/write Built-in DRAM cache.</li> <li>Must support adding NVMe SSD drives to accelerate performance.</li> <li>Must support adding up to 24 drives based on NVMe SSD.</li> </ul>		
<b>Deduplication and Compression</b>	<ul style="list-style-type: none"> <li>The storage solution must support the ability to do Compression/Deduplication for all volumes from day one</li> </ul>		

Next-Gen Enterprise Storage			QTY 2
Item	Description	Comply	Notes
<b>Standard Features</b>	<ul style="list-style-type: none"> <li>The Proposed Array must be licensed to unlimited hosts to the storage system via iSCSI or FC protocols.</li> </ul>		
<b>Redundancy</b>	<ul style="list-style-type: none"> <li>All components should be protected by redundant hot-swappable power supplies and fans with No Single Point of Failure.</li> </ul>		
<b>Management Software</b>	<ul style="list-style-type: none"> <li>The Storage Management software should be array-based and provide GUI / web-based management for workloads with complete Reporting features like LUN Usage, Empty free Space, etc...</li> <li>The Storage Management software should support QoS IO performance management enabled and licensed from day one.</li> </ul> <p>Web-based Management S/W:</p> <ul style="list-style-type: none"> <li>To discover, monitor, and configure multiple storage arrays from a single web-based console.</li> <li>Storage system management shall have Software Security via SSL, user identification, and Access Control.</li> </ul>		
<b>Monitoring Software</b>	<ul style="list-style-type: none"> <li>The Proposed Array must include monitoring features for online monitoring and Gather storage-system performance statistics, produces charts of the data identified, anticipate bottlenecks in the disk storage component, and provide</li> </ul>		

Next-Gen Enterprise Storage			QTY 2
Item	Description	Comply	Notes
	information for load balancing and capacity planning.		
<b>Snapshots / Cloning</b>	<ul style="list-style-type: none"> <li>Proposed Storage must include Local Replication S/W for Snapshots/Cloning License.</li> </ul>		
<b>Thin Provisioning</b>	<ul style="list-style-type: none"> <li>The Proposed Array must include Dynamic Capacity Management S/W (Thin Provisioning) License for the maximum capacity of the offered storage model.</li> </ul>		
<b>Online Data Migration</b>	<ul style="list-style-type: none"> <li>Ability to perform Non-disruptive Online Data migration among different storage pools without affecting/disrupting the production environment.</li> </ul>		
<b>Rack Mount</b>	The Proposed SAN Array must be Rack mounted and must be installed in Standard Rack.		
<b>Virtualization</b>	Storage System Must be compatible with the well-known hypervisor (VMware, Oracle, Microsoft, etc.).		
<b>Workload Support</b>	<ul style="list-style-type: none"> <li>Provide excellent operational support for all types of common applications and platforms with an intermix of any workload type environments: OL TP, Sequential, and OLAP.</li> <li>proven interoperability with VMware vSphere, MS Exchange, Oracle DB, and SQL DB environments.</li> </ul>		
<b>OS Support</b>	Support for Oracle Linux, Windows Server, Redhat LINUX, Linux Suse, HP-UX, IBM AIX,		

Next-Gen Enterprise Storage			QTY 2
Item	Description	Comply	Notes
	Solaris OS, and VMware without any need for any license add-up in the future.		
<b>Sparing</b>	Must be dynamic to allow for sparing capacity on all drives provided rather than dedicating idle spare drives for better capacity utilization & faster rebuild time.		
<b>Replication</b>	The Storage solution must support native block replication with the ability to do Asynchronous replication with the HA site.		
<b>Support and warranty</b>	Must include 3 years HW & SW Mother company 24x7 Support (Parts & Labor).		

4.4.3. Oracle SAN Storage Switches specs:

<b>SAN Switches Specifications</b> <b>QTY 4</b>	Comply	Notes
Well-Known brands. brand Must be supplied by the same storage vendor to provide a vendor single point of support		
Rack mounted in the same rack with servers and SAN storage, all required rack accessories and power cables must be included		
Support heterogeneous server environment on storage area network (SAN) and enable connection support for at least the following operating systems: MS Windows 20XX, liunx and UNIX		

The SAN switch shall have the following minimum specifications: 24P/24P, 32Gb FC Switch SAN Switch Module. . The switch must have 24 active ports out of 32 ports from day 1		
SFP Transceivers 24x32Gb SFPs included		
Port Configurations support, NVMe over FC Ready.		
Support switch mode or Network Port Virtualization (NPV) mode		
4/8/16/32-Gb/s autosensing with 32Gb/s of dedicated bandwidth per port		
Management access through dedicated Management Port, WEB, or CLI		
Include all required cables		
Warranty 3 years, SLA 24*7 mother Company		

4.5. Domain Controller Servers Specification:

Domain Controller Servers			QTY 2
Item	Description	Comply	Notes
Processor	2 x Intel® Xeon® Silver 4310 2.1G, 12C/24T.		
Memory	2 x 16GB RDIMM, 3200MT		
Hard Drives (OS)	2 x 600GB Hard Drive SAS 12Gbps 10k		
OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Citrix Hypervisor, Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Fully Redundant (1+1)		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		

Network	2 x 1GbE for front end connectivity		
Management	<ul style="list-style-type: none"> <li>Advanced Server Management Capabilities. Such as out of band performance monitoring. Two Factor authentication full remote access and resource provisioning.</li> <li>Full features license Remote Control for hardware Management.</li> </ul>		
Form Factor	Rack Mount with all the needed accessories to install in a Rack cabinet with all needed cables		
Support and Warranty	Mother company 24x7 support for 3 years. (Parts & Labor).		

4.6. Remote Sites Standalone Tower Servers (or Rack with Cabinets and all accessories) specifications

SSC has 20 Remote Offices located in different Cities in Jordan, below Specifications for the Tower Servers will be installed, one in each site and will hold 3 to 4 VMs to serve the branches, Hardware Tower Servers and Hypervisor Specifications as below table, in addition to the Management server of the hypervisors that will be located in the main site.

**Note: As an alternative to the tower servers, bidder can provide a rack server with a small cabinet to install the servers in each site. All accessories needed to operate the servers must be provided (PDUs, Cables ...)**

Remote Sites Tower Servers			QTY 20
Item	Description	Comply	Notes
Processor	2 x Intel® Xeon® Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache		
Memory	4 x 32GB RDIMM, 3200MT		
Hard Drives (OS)	2 x 480GB SSD 4 x 2TB SAS 12Gbps 7.2K		

OS and Hypervisor	VMware ESXi, SUSE Linux Enterprise Server, Microsoft Windows Server with Hyper-V.		
Power Supply	Dual, Hot-plug, Power Supply Fully Redundant (1+1)		
Power Cords	2 x Rack Power Cord 2M (C13/C14 10A)		
Network	2 x 1GbE for front end connectivity		
Management	<ul style="list-style-type: none"> <li>Advanced Server Management Capabilities. Such as out of band performance monitoring. Two Factor authentication full remote access and resource provisioning.</li> <li>Full features license Remote Control for hardware Management.</li> </ul>		
Chassis	Tower Chassis with up to 8x3.5" Drives		
Support and Warranty	Mother company support for 3 years. (Parts & Labor).		

4.6.1. Hypervisor and Management for Remote Offices

The Hypervisor in Remote Sites			QTY 5
Item	Description	Comply	Notes
VMware vSphere 7 Remote Office Branch Office Standard (25 VM pack)	<ul style="list-style-type: none"> <li>vSphere Remote Office Branch Office Standard: SnS Required &amp; Sold Separately.</li> <li>VMware vSphere Remote Office Branch Office Standard includes 25 VMs of ESXi. Licensed features include vMotion, High Availability, Data Protection and Replication, vShield Endpoint, Fault Tolerance for workloads up to 2-vCPU, Storage vMotion</li> </ul>		



Management For Hypervisors in Remote Sites			QTY 1
Item	Description	Comply	Notes
VMware vCenter Server Standard	Management of VMware vSphere deployments for rapid provisioning, monitoring, orchestration, and control of virtual machines.		

#### 4.7. Health Check and Monitor Tool(s)

Winning bidder must provide SSC with health check and monitoring tool(s) for all of the following components:

1. HCI Solution.
2. SAN Solution.
3. Backup Solution.
4. Oracle servers, Remote sites standalone servers, and Domain Controller Servers.

The tool(s) must provide Periodically REPORTs on the system health check with the ability to generate automated alerts and notifications on any failure or performance degradation.

#### 4.8. Spare Kit Table

All requested spare kits must be located at SSC premises, as below:

- SAN:

Item	Minimum Quantity
Spare NVMe Disk	2
Power Supply	1
FC Network Card and SFP's	One each

HCI:

Item	Minimum Quantity
RAM	One similar to the installed on HCI
Disk of each type	2 each

Power Supply	1
Network Card	1

Oracle Servers:

Item	Minimum Quantity
RAM	One similar to the installed on Server
Disk	2
Power Supply	1

Remote Offices Servers:

Item	Minimum Quantity
HDD and SAS Disks	2 of each type

Training:

- All below Training must be conducted by a vendor certified training center, price must cover all costs including –if needed- Labs, Materials, Tickets, accommodation, transportation, ...

#	Course Name	Number of seats
1.	VMware VSphere (Install, configure, manage) Training	4
2.	Vendor Software-Defined Storage Training	4
3.	Backup Software Training	6
4.	Cyber Recovery Solution Training	4
5.	SAN Storage Administration Training	4
6.	HCI Administration Training	4

## 5. Administrative Procedures and requirements

### 5.1. BIDDER QUALIFICATIONS

Bidders should provide the below minimum qualifications for the company profile and staff CVs. Deviations may be grounds for disqualifications:

1. Bidder must be a local partner for the provided solution. A valid certified official certificate proving the company is a local Partner for the proposed solution must be attached to the technical proposal. **Not being a local partner for the provided solution will result in disqualifying the proposal.**
2. CVs for the staff who will work on the project. Below are the minimum requirements for the staff qualifications:
  - a. System Engineers: at least 2 certified engineers with 5 years' experience. Resources experiences and certificates should cover the below specialties :
    - a. HCI System.
    - b. VMware.
    - c. SAN Storage.
    - d. Backup Software.
  - b. Project Manager: one resource with 3 years' experience in similar projects.
3. References: 1 similar Hyper-converged infrastructure references projects are required in the last 5 years.

### 5.2. RESPONSE PROCEDURES

All inquiries and Communications with respect to this RFP are to be addressed to MoDEE in writing e-mail with the subject "**Data Center Upgrade for SSC**". All Inquiries can only be addressed to [ [eGov\\_tenders@modee.gov.jo](mailto:eGov_tenders@modee.gov.jo)] by 7/7/2022. Responses will be sent in writing no later than 18/7/2022. Questions and answers will be shared with all Bidders' primary contacts.

### 5.3. RESPONSE FORMAT

The response to this RFP is subject to the general rules applied for responding to government tenders.

Bidders' written response to the RFP must include:

Bidders responding to this RFP shall demonstrate up-to-date capabilities and experience in providing similar services and similar engagements of the same scope and size. These services and engagements must be performed by the bidder during the last 5 years (**minimum 3 similar successfully accomplished projects are required**). **Modee have the right to request accomplishment certificate for the references during evaluation phase. MoDEE/SSC has the right to contact any reference without arranging with bidders.**

#### **Important Note:**

- 1) **Bidders must detail the description about Scope, size and year for each project according to the below template**

Project Name	
Start date	
End date	
Project size and number of services	
Project components	
Client contact number and email	

**Note:** Where some skills are not available, the bidder should joint venture or sub-contract with a reputable **local/international firm** to cover for this specific skill, services or equipment provided that all partners to a joint venture will be jointly and severally responsible towards Modee In case of subcontracting, the subcontractor has to be approved by Modee and the contractor will be liable for all works performed by the sub-contractor.

### ***Part I-A: Technical Proposal***

The response to this RFP is subject to the general rules applied for responding to government tenders.

The technical proposal shall include the approach to achieve the scope of work defined in this RFP and delivering each of the major components as specified in the Scope of Work and Deliverables section.

In order for the evaluation to progress quickly and effectively, bidders are requested to provide this part of their proposal in the following format:

- a. Corporate capability statement : Corporate capability statement must include all the following:
  - Corporate technical capabilities and experience in implementing similar solutions together with detailed description and reference to each component underlined in Section 3: Scope of the Work and Deliverables.
  - Detailed proposed Team Resumes (with names) (each resume will be subjected to the approval of MoDEE/SSC, in case of replacements the winning bidder has to abide by SSC requirements for replacements and approvals. In the implementation phase SSC reserves the right to request replacement of any resource that cannot fulfill the job)
  - Description and references to similar projects performed in the last 5 years.
  - If a bidder is a joint venture, partners need to be specified with the rationale behind the partnership. Corporate capability statement should be provided for all partners
  - Current client list, highlighting potential conflict of interest
  - Submit work plan allocation resources with their percentage of involvement

- b. Compliance sheet showing the BoQ and all Item described in sections 3 scope of work and Deliverables, and 4 Solution Specifications beside any additional related activities needed for the successful implementation of the project.

The bidder should provide deliverables in English only.

## Part I-B: Financial proposal

The financial proposal must include the unit prices (rates) for each item identified in the section 3 Scope of Work and Deliverables and section 4 Solution Specification. Bidders should fill in their lump sum prices and unit rates and sign the Bill of Quantities (remuneration schedule) and attach both to the financial proposal.

The financial proposal must provide the lump sum prices for all technical activities mentioned in section 3(Scope of Work), where the cost of each activity should be clearly identified.

The supporting detailed cost analysis should provide a breakdown and details of the financial including cost for hardware/software, etc. The daily rates and expenses for any project staff should be included separately, along with the time for which they will be required.

### The financial offer should be inclusive of the General Sales Tax and all applicable fees and taxes

- على الفريق الثاني ان يشمل سعره الضريبة العامة على المبيعات بنسبة (16 %) الا اذا كانت الشركة خاضعة للضريبة العامة على المبيعات بنسبة (0) % (بموجب كتاب رسمي من هيئة الاستثمار يرفق مع العرض المالي) ويتم عكس هذه النسبة على السعر المقدم من قبلها .
- في حال عدم توضيح الضريبة العامة على المبيعات على السعر المقدم من قبل الشركة يعتبر سعر الشركة شامل للضريبة العامة على المبيعات بنسبة 16 %.

## Part II: Bid Security

This part includes the original Bid Guarantee.

### 5.4. RESPONSE SUBMISSION

Bidders must submit their proposals to this RFP to the secretary of Special Purchasing Committee \ Tendering & procurements Department at the Ministry of Digital Economy and Entrepreneurship no later than 12:00 pm on 27/7/2022.

Ministry of digital economy and entrepreneurship (MoDEE)

Tender No: 28eGovt2022  
Tendering Department – 3rd floor  
Ministry of digital economy and entrepreneurship (MoDEE)  
8th circle  
P.O. Box 9903  
Amman 11191 Jordan  
Tel: 00 962 6 5805642  
Fax: 00 962 6 5861059

Proposals should be submitted as 2 separate parts ,each part in a separate well-sealed and wrapped envelope clearly marked, respectively, as follows:

- **Part I “Data Center Upgrade for SSC - Technical Proposal and Financial Proposal”**. This part (envelope) should contain 3 hard copies (1 original and 2 copy) and 1 softcopy (CD) [in Microsoft Office 2010 or Office 2010 compatible formats].
- **Part II “Data Center upgrade for SSC – Bid Security”** This part (envelope) should contain 1 hard copy. This part should not contain any reference to cost or price. Inclusion of any cost or price information in the technical proposal will result in the bidder’s proposal being disqualified as irresponsible.

**As evaluation is based on the \*lowest complied\* ارضى المطابق , technical and financial proposals will be opened simultaneously and evaluation shall be proceeding accordingly.**

**Note:** Each CD should be enclosed in the relevant envelop. Late submissions will not be accepted nor considered and in case of discrepancy between the original hard copy and other hard copies and/or the soft copy of the proposal, the hard copy marked as original will prevail and will be considered the official copy. Proposals may be withdrawn or modified and resubmitted in writing any time before the submission date.

Regardless of method of delivery, the proposals must be received by the MoDEE no later than 12:00 PM [27/7/2022] (Amman Local Time). MoDEE will not be responsible for premature opening of proposals not clearly labeled.

### **5.5. RESPONSE EVALUATION**

The overall proposal will be evaluated both technically and financially, and will be awarded according to the lowest complied proposal (أرضى العروض المطابقة). MoDEE reserves the right not to select any offer. MoDEE also assumes no responsibility for costs of bidders in preparing their submissions

### **5.6. FINANCIAL TERMS**

Bidders should take into consideration the following general financial terms when preparing and submitting their proposals:

- All prices should be quoted in Jordanian Dinars inclusive of all expenses, governmental fees and taxes, including sales tax
- The type of contract will be a fixed lump sum price contract including costs of all software or/and hardware, licenses, documentation, maintenance, support, knowledge transfer, training, warranty, and professional fees, profits and overheads and all other expenses incurred
- A clear breakdown (table format) of the price should be provided including price for consulting time, other expenses, etc.
- The bidder shall bear all costs associated with the preparation and submission of its proposal and Modee will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the proposal process.
- The bidders shall furnish detailed information listing all commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and to contract execution if the bidder is awarded the contract. The information to be provided shall list the name and address of any agents, the amount and currency paid and the purpose of the commission or gratuity.
- The Bidder shall submit a (Tender Bond) proposal security on a form similar to the attached format in Jordanian Dinars for a flat sum of (20000J.D) (in a separate sealed envelope. The bond will be in the form of a certified cheque or bank guarantee from a reputable registered bank, located in Jordan, selected by the bidder
- r. The bidder shall ensure that the (tender bond) proposal security shall remain valid for a period of 90 days after the bid closing date or 30 days beyond any extension subsequently requested by the tendering committee, and agreed to by the bidder.
- Any proposal not accompanied by an acceptable proposal security (tender bond) shall be rejected by the tendering committee as being non-responsive pursuant to RFP.
- The proposal security of a joint venture can be in the name of all members participating in the joint venture submitting the proposal or in the name of one or more members in the joint venture.
- The proposal security of the unsuccessful bidders will be returned not later than 30 days after the expiration of the proposal validity period.
- The winning bidder is required to submit a performance bond of 10% of the total value of the contract within 14 days as of the date of award notification letter.
- The proposal security of the winning bidder will be returned when the bidder has signed the contract and has furnished the required performance security.
- The proposal security may, in the sole discretion of the tendering committee, be forfeited:
  - o If the bidder withdraws its proposal during the period of proposal validity as set out in the RFP; or
  - o In the case of winning bidder, if the bidder fails within the specified time limit to sign the contract; or sign the joint venture agreement in front of a notary public in Amman, Jordan; or furnish the required performance security as set out in the contract.
- The winning bidder has to pay the fees of the RFP advertisement issued in the newspapers.
- Modee is not bound to accept the lowest bid and will reserve the right to reject any bids without the obligation to give any explanation.
- Bidders must take into consideration that payments will be as specified in the tender documents and will be distributed upon the winning submission and acceptance of the scope of work and of the deliverables and milestones of the scope of work defined for the project by the first party.

- Modee takes no responsibility for the costs of preparing any bids and will not reimburse any Bidder for the cost of preparing its bid whether winning or otherwise.

## 5.7. *LEGAL TERMS*

Bidders should take into consideration the following general legal terms when preparing and submitting their proposals:

- If the Bidder decides to form a joint venture, Each partner in the joint venture shall be a business organization duly organized, existing and registered and in good standing under the laws of its country of domicile. The Bidder must furnish evidence of its structure as a joint venture including, without limitation, information with respect to:
  - the legal relationship among the joint venture members that shall include joint and several liability to execute the contract; and
  - the role and responsibility of each joint venture member
- The Bidder must nominate a managing member (leader) for any joint venture which managing member will be authorized to act and receive instructions on behalf of all the joint venture members
- All bidders should duly sign the joint venture agreement attached to this RFP under Annex 7.7 by authorized representatives of the joint venture partners without being certified by a notary public and to be enclosed in the technical proposal in addition to authorization for signature on behalf of each member. Only the winning bidder partners in a joint venture should duly sign the joint venture agreement attached to this RFP under Annex 7.7 by authorized signatories and this agreement is to be certified by a Notary Public in Jordan
- The bidders shall not submit alternative proposal. Alternative proposals will be returned unopened or unread. If the bidder submits more than one proposal and it is not obvious, on the sealed envelope(s), which is the alternative proposal, in lieu of returning the alternative proposal, the entire submission will be returned to the bidder and the bidder will be disqualified.



- The proposal shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the contract. The latter authorization shall be indicated by duly-legalized power of attorney. All of the pages of the proposal, except un-amended printed literature, shall be initialed by the person or persons signing the proposal.
- 
- Any interlineations, erasures or overwriting shall only be valid if they are initialed by the signatory (ies) to the proposal.
- 
- The bid shall contain an acknowledgement of receipt of all Addenda to the RFP, the numbers of which must be filled in on the Form of Bid attached to the Arabic Sample Agreement
- Modee requires that all parties to the contracting process observe the highest standard of ethics during the procurement and execution process. The Special Tenders Committee will reject a proposal for award if it determines that the Bidder has engaged in corrupt or fraudulent practices in competing for the contract in question.

**Corrupt Practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution>

**Fraudulent Practice** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of Modee, and includes collusive practice among Bidders (prior to or after proposal submission) designed to establish proposal prices at artificial non-competitive levels and to deprive SSC of the benefits of free and open competition.

- No bidder shall contact Modee, its employees or the Special Tenders Committee or the technical committee members on any matter relating to its proposal to the time the contract is awarded. Any effort by a bidder to influence Modee, its employees, the Special Tenders Committee or the technical committee members in the tendering committee's proposal evaluation, proposal comparison, or contract award decision will result in rejection of the bidder's proposal and forfeiture of the proposal security
- The remuneration of the Winning Bidder stated in the Decision of Award of the bid shall constitute the Winning Bidder sole remuneration in connection with this Project and/or the Services, and the Winning Bidder shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Winning Bidder

shall use their best efforts to ensure that the Personnel, any Sub-contractors, and agents of either of them similarly shall not receive any such additional remuneration.

- 
- A business registration certificate should be provided with the proposal
- 
- If the bidder is a joint venture, then the partners need to be identified with the rationale behind the partnership. Corporate capability statement should also be provided for all partners.
- 
- The laws and regulations of The Hashemite Kingdom of Jordan shall apply to awarded contracts.
  
- The Bidder accepts to comply with all provisions, whether explicitly stated in this RFP or otherwise, stipulated in the government Procurement By-Law No8 of 2022 and its Instructions, , and any other provisions stated in the Standard Contracting sample Arabic Contract Agreement Annexed to this RFP including general and special conditions, issued pursuant to said Unified Procurement By-Law No8 of 2022 and its Instructions
- Modee takes no responsibility for the costs of preparing any bids and will not reimburse any bidder for the cost of preparing its bid whether winning or otherwise.
- 
- Bidders must review the Sample Arabic Contract Agreement provided with this RFP and that will be the Contract to be signed with the winning bidder. Provisions in this Sample Arabic Contract Agreement are not subject to any changes; except as may be amended by SCPD before tender submission; such amendments are to be issued as an addenda.
- 
- Proposals shall remain valid for period of (90) days from the closing date for the receipt of proposals as established by the Special Tenders Committee.
- 
- The Special Tenders Committee may solicit the bidders' consent to an extension of the proposal validity period. The request and responses thereto shall be made in writing or by fax. If a bidder agrees to prolong the period of validity, the proposal security shall also be suitably extended. A bidder may refuse the request without forfeiting its proposal security; however, in its discretion, the Special Tenders Committee may cease further review and consideration of such bidder's proposal. A bidder granting the request will not be required nor permitted to modify its proposal, except as provided in this RFP.
- 
- Modee reserves the right to accept, annul or cancel the bidding process and reject all proposals at any time without any liability to the bidders or any other party and/withdraw this tender without providing reasons for such action and with no legal or financial implications to Modee.
-

- Modee reserves the right to disregard any bid which is not submitted in writing by the closing date of the tender. An electronic version of the technical proposal will only be accepted if a written version has also been submitted by the closing date.
- 
- Modee reserves the right to disregard any bid which does not contain the required number of proposal copies as specified in this RFP. In case of discrepancies between the original hardcopy, the other copies and/or the softcopy of the proposals, the original hardcopy will prevail and will be considered the official copy.
- 
- SSC reserves the right to enforce penalties on the winning bidder in case of any delay in delivery defined in accordance with the terms set in the sample Arabic contract. The value of such penalties will be determined in the Sample Arabic contract for each day of unjustifiable delay.
- 
- Bidders may not object to the technical or financial evaluation criteria set forth for this tender.
- 
- The winning bidder will be expected to provide a single point of contact to which all issues can be escalated. SSC will provide a similar point of contact.
- 
- SSC is entitled to meet (in person or via telephone) each member of the consulting team prior to any work, taking place. Where project staff is not felt to be suitable, either before starting or during the execution of the contract, SSC reserves the right to request an alternative staff at no extra cost to SSC.
- 
- Each bidder will be responsible for providing his own equipment, office space, secretarial and other resources, insurance, medical provisions, visas and travel arrangements. SSC will take no responsibility for any non-Government of Jordan resources either within Jordan or during travel to/from Jordan.
- 
- Any source code, licenses, documentation, hardware, and software procured or developed under 'DC Upgrade for SSC' is the property of SSC upon conclusion of 'The Project'. Written consent of SSC must be obtained before sharing any part of this information as reference or otherwise.
- 
- Bidders are responsible for the accuracy of information submitted in their proposals. Modee reserves the right to request original copies of any documents submitted for review and authentication prior to awarding the tender.
- 
- The bidder may modify or withdraw its proposal after submission, provided that written notice of the modification or withdrawal is received by the tendering committee prior to the deadline prescribed for proposal submission. Withdrawal of a proposal after the deadline prescribed for

proposal submission or during proposal validity as set in the tender documents will result in the bidder's forfeiture of all of its proposal security (bid bond).

- 
- A bidder wishing to withdraw its proposal shall notify the Special Tenders Committee in writing prior to the deadline prescribed for proposal submission. A withdrawal notice may also be sent by fax, but it must be followed by a signed confirmation copy, postmarked no later than the deadline for submission of proposals.
- 
- The notice of withdrawal shall be addressed to the Special Tenders Committee at the address in RFP, and bear the contract name "DC Upgrade for SSC" and the words "Withdrawal Notice".
- 
- Proposal withdrawal notices received after the proposal submission deadline will be ignored, and the submitted proposal will be deemed to be a validly submitted proposal.
- 
- No proposal may be withdrawn in the interval between the proposal submission deadline and the expiration of the proposal validity period. Withdrawal of a proposal during this interval may result in forfeiture of the bidder's proposal security.
  
- The Bidder accepts to comply with all provisions, that are explicitly stated in this RFP and any other provisions stated in the Standard Sample Arabic Contract Agreement attached hereto and Tendering Instruction and attached hereto.
- 
- 
- The winning bidder shall perform the Services and carry out their obligations with all due diligence, efficiency, and economy, in accordance with the highest generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Winning Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to SSC, and shall at all times support and safeguard SSC's legitimate interests in any dealings with Sub-contractors or third parties.
- 
- If there is any inconsistency between the provisions set forth in the Sample Arabic Contract Agreement attached hereto or this RFP and the proposal of Bidder; the Sample Arabic Contract Agreement and /or the RFP shall prevail
- 
- SSC reserves the right to furnish all materials presented by the winning bidder at any stage of the project, such as reports, analyses or any other materials, in whole or part, to any person. This shall include publishing such materials in the press, for the purposes of informing, promotion, advertisement and/or influencing any third party. SSC shall have a perpetual,

irrevocable, non-transferable, paid-up right and license to use and copy such materials mentioned above and prepare derivative works based on them.

- Bidders (whether in joint venture or alone) are not allowed to submit more than one proposal for this RFP. If a partner in a joint venture participate in more than one proposal; such proposals shall not be considered and will be rejected for being none-responsive to this RFP.
- 
- Amendments or reservations on any of the Tender Documents: Bidders are not allowed to amend or make any reservations on any of the Tender Documents or the Arabic Sample contract agreement attached hereto. In case any bidder does not abide by this statement, his proposal will be rejected for being none-responsive to this RFP. If during the implementation of this project; it is found that the winning bidder has included in his proposal any amendments, reservations on any of the tender documents or the Contract; then such amendments or reservations shall not be considered and the items in the tender documents and the Contract shall prevail and shall be executed without additional cost to SSC and the winning bidder shall not be entitled to claim for any additional expenses or take any other legal procedures.
- Nothing contained herein shall be construed as establishing a relation of principal and agent as between SSC and the Winning Bidder. The Winning Bidder has complete charge of Personnel and Sub-contractors, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.
- 
- The Winning Bidder, their Sub-contractors, and the Personnel of either of them shall not, either during the term or after the expiration of the Contract, disclose any proprietary or confidential information relating to the Project, the Services, the Contract, or SSC's business or operations without the prior written consent of SSC. The Winning Bidder shall sign a Non-Disclosure Agreement with SSC as per the standard form adopted by SSC. A confidentiality undertaking is included in annex 5.7.
- Sample Arabic Contract Agreement Approval:

**Bidders must review the Sample Arabic Contract Agreement version provided with the RFP, which shall be binding and shall be signed with winning bidder.**

**Bidders must fill out, stamp and duly sign the Form of Bid (نموذج عرض المناقصة) attached to the Arabic Sample Agreement under (2) ملحق رقم 2 and enclose it in their financial proposals.**

**Bidders must fill out the summary payment schedule form sub annex 3 (الملحق رقم 3) which is part of the Arabic Sample Contract version provided with the RFP, sign and stamp it, and enclose it with the Financial Proposal.**

**Proposals that do not include these signed forms are subject to rejection as being none responsive.**

- **PROHIBITION OF CONFLICTING ACTIVITIES**

Neither the Winning Bidder nor their Sub-contractors nor their personnel shall engage, either directly or indirectly, in any of the following activities:

- During the term of the Contract, any business or professional activities in Jordan or abroad which would conflict with the activities assigned to them under this bid; or
- After the termination of this Project, such other activities as may be specified in the Contract.

- **INTELLECTUAL PROPERTY RIGHTS PROVISIONS**

- Intellectual Property for the purpose of this provision shall mean all copyright and neighboring rights, all rights in relation to inventions (including patent rights), plant varieties, registered and unregistered trademarks (including service marks), registered designs, Confidential Information (including trade secrets and know how) and circuit layouts, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.
- Contract Material for the purpose of this provision shall mean all material (includes documents, equipment, software, goods, information and data stored by any means):
  - a) Brought into existence for the purpose of performing the Services;
  - b) incorporated in, supplied or required to be supplied along with the Material referred to in paragraph (a); or
  - c) Copied or derived from Material referred to in paragraphs (a) or (b);
- Intellectual Property in all Contract Material vests or will vest in SSC. This shall not affect the ownership of Intellectual Property in any material owned by the Winning Bidder, or a Sub-contractor, existing at the effective date of the Contract. However, the Winning Bidder grants to SSC, or shall procure from a Sub-contractor, on behalf of SSC, a permanent, irrevocable, royalty-free, worldwide, non-exclusive license (including a right of sub-license) to use, reproduce, adapt and exploit such material as specified in the Contract and all relevant documents.
- If requested by SSC to do so, the Winning Bidder shall bring into existence, sign, execute or otherwise deal with any document that may be necessary or desirable to give effect to these provisions.

- The Winning Bidder shall at all times indemnify and hold harmless SSC, its officers, employees and agents from and against any loss (including legal costs and expenses on a solicitor/own client basis) or liability incurred from any claim, suit, demand, action or proceeding by any person in respect of any infringement of Intellectual Property by the Winning Bidder, its officers, employees, agents or Sub-contractors in connection with the performance of the Services or the use by SSC of the Contract Material. This indemnity shall survive the expiration or termination of the Contract.
- The Winning Bidder not to benefit from commissions discounts, etc. The remuneration of the Winning Bidder stated in the Decision of Award of the bid shall constitute the Winning Bidder sole remuneration in connection with this Project and/or the Services, and the Winning Bidder shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Winning Bidder shall use their best efforts to ensure that the Personnel, any Sub-contractors, and agents of either of them similarly shall not receive any such additional remuneration.

- THIRD PARTY INDEMNITY

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Unless specified to the contrary in the Contract, the Winning Bidder will indemnify SSC, including its officers, employees and agents against a loss or liability that has been reasonably incurred by SSC as the result of a claim made by a third party:

- Where that loss or liability was caused or contributed to by an unlawful, negligent or willfully wrong act or omission by the Winning Bidder, its Personnel, or sub-contractors; or
- 
- Where and to the extent that loss or liability relates to personal injury, death or property damage.

- LIABILITY

- The liability of either party for breach of the Contract or for any other statutory cause of action arising out of the operation of the Contract will be determined under the relevant law in Hashemite Kingdom of Jordan as at present in force. This liability will survive the termination or expiry of the Contract. Winning bidder's total liability relating to contract shall in no event exceed the fees Winning bidder receives hereunder, such limitation shall not apply in the following cases (in addition to the case of willful breach of the contract):
  - gross negligence or willful misconduct on the part of the Consultants or on the part of any person or firm acting on behalf of the Consultants in carrying out the Services,

- an indemnity in respect of third party claims for damage to third parties caused by the Consultants or any person or firm acting on behalf of the Consultants in carrying out the Services,
- infringement of Intellectual Property Rights

## **5.8. CONFLICT OF INTEREST**

- The Winning bidder warrants that to the best of its knowledge after making diligent inquiry, at the date of signing the Contract no conflict of interest exists or is likely to arise in the performance of its obligations under the Contract by itself or by its employees and that based upon reasonable inquiry it has no reason to believe that any sub-contractor has such a conflict.
- If during the course of the Contract a conflict or risk of conflict of interest arises, the Winning bidder undertakes to notify in writing SSC immediately that conflict or risk of conflict becomes known.
- The Winning bidder shall not, and shall use their best endeavors to ensure that any employee, agent or sub-contractor shall not, during the course of the Contract, engage in any activity or obtain any interest likely to conflict with, or restrict the fair and independent performance of obligations under the Contract and shall immediately disclose to SSC such activity or interest.
- If the Winning bidder fails to notify SSC or is unable or unwilling to resolve or deal with the conflict as required, SSC may terminate this Contract in accordance with the provisions of termination set forth in the Contract.

## **5.9. SECRECY AND SECURITY**

The Winning bidder shall comply and shall ensure that any sub-contractor complies, so far as compliance is required, with the secrecy and security requirements of SSC, or notified by SSC to the Winning bidder from time to time.

## **5.10. DOCUMENT PROPERTY**

All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Winning bidder in accordance with the Contract shall become and remain the property of SSC, and the Winning bidder shall, not later than upon termination or expiration of the Contract, deliver all such documents and software to SSC, together with a detailed inventory thereof. Restrictions about the future use of these documents, if any, shall be specified in the Special Conditions of the Contract.

## **5.11. REMOVAL AND REPLACEMENT OF PERSONNEL**



- Except as SSC may otherwise agree, no changes shall be made in the key Personnel. If, for any reason beyond the reasonable control of the Winning bidder, it becomes necessary to replace any of the key Personnel, the Winning bidder shall provide as a replacement a person of equivalent or better qualifications and upon SSC approval.
- If SSC finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Winning bidder shall, at SSC written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to SSC.

#### **5.12. *OTHER PROJECT RELATED TERMS***

SSC reserves the right to conduct a technical audit on the project either by SSC resources or by third party.

## 6. Bill of Quantity (BoQ)

The below items should be listed in the bidder's financial proposal and their prices should be included in the lump sum price:

**NOTE: Below quantities are the minimum accepted quantities. Any other quantities needed for the successful implementation of the service should be provided as well.**

**One-year option for support and licenses:**

	Item	Unite	QTY	Unit Price (JD)	Total (JD)
1	HCI Solution				
1.1	Hyper Converged Infrastructure (Main Site)		1		
	Hyper Converged Infrastructure (HA Site)		1		
1.2	Inter-site and Intra-Site Replication Software		1		
1.3	Top of the Rack Networking Switches		6		
1.4	Management Switch Specifications		2		
2	Backup Solution				
2.1	Backup to Disk Appliance		2		
2.2	Backup Software		As proposed by bidder		
2.3	Backup Software Licenses and Server Specifications		As proposed by bidder		
2.4	Tape Library		1		
3	Cyber Recovery OR Equivalent Solution (Golden Image)				
3.1	Cyber Recovery Solution Requirements		As proposed by bidder		
3.2	Isolated Site Backup Appliance		As proposed by bidder		
3.3	Isolated Servers (Test Server)		1		
	App Server (Analytical tools & AI Server) (If needed)		1		

	Virtualized Server		1		
3.4	Isolated Top of Rack Switches		2		
4	Oracle Hardware Solution				
4.1	Servers for Oracle DB and APP in the Main Site		4		
	Servers for oracle DB and APP in the HA Site		4		
4.2	Oracle SAN Storage		2		
4.3	Oracle SAN Storage Switches		4		
5	Domain Controller Servers Specification		2		
6	Remote Sites Standalone Tower Servers (or Rack with Cabinets and all accessories) specifications		20		
	Hypervisor for remote sites		5		
6.1	Management for Hypervisor in Remote sites		1		
7	Health Check and Monitor Tool(s)		As proposed by bidder		
8	Trainings		6		
9	Professional Services		Lump Sum		
10	Spare Kit Table		As mentioned in section 4.8		
Total					
Taxes and Fees (including Sales Tax)					
Grand Total					

**Note:**

- 1- All prices should be quoted in Jordanian Dinars inclusive of all expenses, governmental fees and taxes, including sales tax.
- 2- Prices should be listed in the financial proposal only.

## 7. Annexes

### 7.1. *Sample Arabic Agreement*

<Attached>

### 7.2. *Key RFP Dates*

<b>ITEM</b>	<b>DATE (DD/MM/YY)</b>
Date of RFP distribution	30/6 – 26/7/2022
Deadline for submission of bidders' questions to RFP	7/7/2022
Expected date for answers to bidders' questions	18/7/2022
Proposal deadline	27/7/2022

### 7.3. Confidentiality Undertaken

#### Confidentiality Undertaking

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This Undertaking is made on [DATE] by [NAME] “[Consultant]” to the benefit of the Ministry of Digital economy and entrepreneurship (MODEE), “[Principal]” [8th Circle, P.O. Box 9903, Amman 11191 Jordan].

**WHEREAS**, MODEE possesses certain financial, technical, administrative and other valuable Information (referred to hereinafter as Confidential Information)

**WHEREAS**, [Consultant], while performing certain tasks required by the Principal in connection with the ..... (the Project), did access such Confidential Information,

**WHEREAS**, the Principal considers the Confidential Information to be confidential and proprietary.

#### **Confidential Information:**

As used in this Agreement, the term “Confidential Information” means all information, transmitted by Principal or any of its subsidiaries, affiliates, agents, representatives, offices and their respective personnel, consultants and winning bidders, that is disclosed to the Winning bidder or coming to his knowledge in the course of evaluating and/or implementing the Project and shall include all information in any form whether oral, electronic, written, type written or printed form. Confidential Information shall mean information not generally known outside the Principal, it does not include information that is now in or hereafter enters the public domain without a breach of this Agreement or information or information known to Winning bidder by Third Party who did not acquire this information from Principal”.

The Consultant hereby acknowledges and agrees that;

- (1) The Confidential Information will be retained in the Principal’s premises and will not be moved without the express written consent of the Principal. All Confidential Information shall be and remain the property of the Principal, and such Confidential Information and any copies thereof, as well as any summaries thereof, shall be promptly returned to the Principal upon written request and/or destroyed at the Principal's option without retaining any copies. The Winning bidder shall not use the Confidential Information for any purpose after the Project.
- (2) It will use all reasonable means and effort, not less than that used to protect its own proprietary information, to safeguard the Confidential Information.
- (3) Winning bidder shall protect Confidential Information from unauthorized use, publication or disclosure.
- (4) It will not, directly or indirectly, show or otherwise disclose , publish, communicate, discuss , announce, make available the contents of the Confidential Information or any part thereof to any other person or entity except as authorized in writing by the Principal.
- (5) It will make no copies or reproduce the Confidential Information, except after the Principal’s written consent.

#### **Remedy and damages:**

The Winning bidder acknowledges that monetary damages for unauthorized disclosure may not be less than 20% of the Project and that Principal shall be entitled, in addition to monetary damages and without waiving any other rights or remedies, to such injunctive or equitable relief as may be deemed proper by a court of competent jurisdiction.

### **Employee Access and Control of Information**

It is understood that the Winning bidder might need from time to time to discuss the details of confidential Information with other individuals employed within its own or associated companies in order to support, evaluate, and/or advance the interests of the subject business transaction. Any such discussion will be kept to a minimum, and the details disclosed only on a need to know basis. Prior to any such discussion, the Winning bidder shall inform each such individual of the proprietary and confidential nature of the Confidential Information and of the Winning bidder's obligations under this Agreement. Each such individual shall also be informed that by accepting such access, he thereby agrees to be bound by the provisions of this Agreement. Furthermore, by allowing any such access, the Winning bidder agrees to be and remain jointly and severally liable for any disclosure by any such individual that is not in accordance with this Agreement.

### **Miscellaneous**

The obligations and rights of the Parties shall be binding on and inure to the benefit of their respective heirs, successors, assigns, and affiliates. This Agreement may be amended or modified only by a subsequent agreement in writing signed by both parties. Winning bidder may not transfer or assign the Agreement or part thereof. No provision of this Agreement shall be deemed to have been waived by any act or acquiescence on the part of the Principal, its agents or employees, nor shall any waiver of any provision of this Agreement constitute a waiver of any other provision(s) or of the same provision on another occasion. This Agreement shall be construed and enforced according to Jordanian Law. The Winning bidder hereby agrees to the jurisdiction of the Courts of Amman, Jordan and to the jurisdiction of any courts where the Principal deems it appropriate or necessary to enforce its rights under this Agreement.

### **Term of Agreement**

The obligations of the parties under this Agreement shall continue and survive the completion of the Project and shall remain binding even if any or all of the parties abandon their efforts to undertake or continue the Project.

IN WITNESS WHEREOF, the Winning bidder hereto has executed this Agreement on the date first written above.

**Consultant:**

**By:** \_\_\_\_\_

**Authorized Officer**

## **7.4. Support Procedures**

The winning bidder is required to comply with the following:

1. Support activities are required to cover all components of the proposed solution.
2. Response /Resolution Times and Severity Levels defined in the table below

### **7.4.1.Support Requirements**

The winning bidder is required to provide the following:

1. Assign a contact person/account manager to be responsible of maintenance and support
2. Assign a hot line number to be used for reporting severity 1 and 2 incidents
3. Provide communication channels to enable SSC to report incidents that should be tracked and monitored till final resolution by the winning bidder, and keeping SSC informed about the status for these incidents
4. Define Escalation Procedure including the levels of escalation and name and contact details for contact person
5. Applying the latest fixes, patches and required updates to the installed software during the support and maintenance period (if required) while ensuring system's integrity, reliability, conformity and normal operation for all system features including the content
6. Use a ticketing system that records all incidents reported by operational team, that can be accessed by SSC and generate reports of various SSC incidents
7. Issue a service report after each site visit, to register reported incident, root cause, and followed procedures till a successful resolution
8. Adhere to response and resolution times as per Response and Restoration Matrix shown in table below

### **7.4.2.Severity Levels**

#### **Severity One (Urgent)**

A severity one (1) issue is a catastrophic production problem which may severely impact the Required Service\Solution Availability, in such case, part or all Required Service\Solution production components are down or not functioning; loss of production data or availability of services and no procedural work around exists.

#### **Severity Two (High)**

A severity two (2) issue is a problem where the Required Service\Solution is functioning but in a severely reduced capacity. The situation is causing significant impact to portions of business operations and productivity of Required Service\Solution. The system is exposed to potential loss or interruption of service.

#### **Severity Three (Medium)**

A severity three (3) issue is a medium-to-low impact problem which involves partial non-critical functionality loss one which impairs some operations but allows the Required Service\Solution users/administrators to continue to function. This may be a minor issue with limited loss or no loss of functionality or impact to the client's operation and issues in which there is an easy circumvention or avoidance by the end user.

**Severity Four (Low)**

Important problem but it can wait no loss of functionality or impact to the client's operation and issues in which there is an easy circumvention or avoidance by the end user.

**Table 1: Response, Resolution, times for different severity levels**

Severity	Response Time	Resolution Time
1	1 hour	4 hours.
2	3 hours	24 hours
3	4 hours	72 hours
4	8 hours	one week

\* Support required being 24x7 basis

Where:

**Response Time:** Time taken to acknowledge receiving of reported incident calculated from the time sending an email explaining the incident, opening a ticket on bidder ticketing system, or conducting a phone call with the assigned support engineer by the bidder or bidder’s first line of support.

**Resolution Time:** Time taken to solve the reported incident completely. Resolution Time is calculated from the end of the defined response time for each severity level as shown in the above table.

**7.4.3. Escalation Procedure and Penalties:**

For incidents classified as Severity Level 1, 2, 3 & 4, if bidder:

1. Passed the Response Time: first level of escalation will be applied by notifying bidder’s Technical Support Manager or the assigned contact person.

Passed the Resolution Time: SSC is entitled to fix the problem and to apply penalty on the winning bidder in accordance with the following criteria in the below table and all costs incurred by SSC team for fixing the problem will be charged to the winning bidder and deducted from his dues or the performance bond.



**Table 2: Penalties**

Severity	Definition	Penalty
1	Must be done, essential to business survival. Business can't continue	A penalty of 23 J.D. shall be applied for each hour pass the resolution time. This penalty shall continue for the first 24 hours (23x24). If delay continues, then the penalty of 552 J.D. per day shall be applied and for the maximum duration of 2 days; after that, 3 <sup>rd</sup> party will be called to fix the problem, and all costs incurred by SSC for fixing the problem shall be charged to the winning bidder.
2	Should be done, near essential to business survival.	A penalty of 552J.D. shall be applied for each day pass the resolution time. This penalty will be applied for the maximum duration of 3 days; after that, 3 <sup>rd</sup> party will be called to fix the problem, and all costs incurred by SSC for fixing the problem shall be charged to the winning bidder
3	Could be done, high benefit to business if time and resources are available.	A penalty of 470 J.D. shall be applied for each day pass the resolution time. This penalty will be applied for the maximum duration of 4 days; after that, 3 <sup>rd</sup> party will be called to fix the problem, and all costs incurred by SSC for fixing the problem shall be charged to the winning bidder
4	Important problem but can wait	A penalty of 400 J.D. shall be applied for each day pass the resolution time. This penalty will be applied for the maximum duration of 5 days; after that, 3 <sup>rd</sup> party will be called to fix the problem. and all costs incurred by SSC for fixing the problem shall be charged to the winning bidder

**7.5. Current Services and VMs**

<<Attached>>

**7.6. List of SSC Branches within Scope**

<<Attached>>

## 7.7. Joint Venture Agreement Template

### Standard Form of Joint-venture Agreement

#### JOINT-VENTURE AGREEMENT

#### اتفاقية ائتلاف

It is agreed on this day.....of.....2008  
between:-

تم الاتفاق في هذا اليوم / / الموافق

..... Represented by Mr. ....  
..... Represented by Mr. ....  
..... Represented by Mr. ....

..... ويمثلها السيد .....  
..... ويمثلها السيد .....  
..... ويمثلها السيد .....

1- To form a Joint Venture to execute the works specified  
in the Contract of the Central Tender No. ( / )  
..... which was signed  
or to be signed with the Employer.

1- على تشكيل ائتلاف فيما بينهم لتنفيذ أشغال عقد العطاء رقم ( / )  
المتعلق بـ..... المبرم أو الذي سوف  
يبرم مع صاحب العمل.

2- All parties of the Joint Venture shall be obliged to  
perform all works agreed upon with the employer  
which are specified in the tender contract, and they  
are jointly and severally responsible for all works  
related to tender no. ( / ) and the contract  
pertaining thereto. Should one party fails or delays to  
perform its obligations either partially or totally, it  
shall be the responsibility of all other parties jointly  
and severally without reservation to execute all  
obligations set under the contract with the Employer  
to the same standards specified by the contract .

2- يلتزم جميع أطراف الائتلاف بإنجاز جميع الأشغال المتفق عليها مع  
صاحب العمل والمنصوص عليها في عقد العطاء ويكونون  
متضامنين ومتكافلين في مسؤولياتهم نحو صاحب العمل فيما يخص  
كافة الأشغال المتعلقة بالعطاء رقم ( / ) والعقد الخاص به. وفي  
حالة تخلف أو تأخر أحد أطراف الائتلاف عن إنجاز المسؤوليات المناط  
به تنفيذها جزئياً أو كلياً يلتزم بقية الأطراف مجتمعين و / أو منفردين  
دون تحفظ بإنجاز جميع الالتزامات المحددة بالعقد الموقع مع صاحب  
العمل بالشكل المتفق عليه في العقد.

3- The parties to the Joint Venture nominate  
..... as leader of the Joint  
Venture. Any correspondence between the Employer  
and the parties to the Joint Venture shall be addressed  
to such leader.

3- يعين أطراف الائتلاف رئيساً للائتلاف،.....  
لإدارة العطاء رقم ( / ) ، وأي مراسلات تتم بين صاحب العمل  
والائتلاف، التجمع او المشاركة توجه إليه

4- The parties to the Joint Venture nominate  
Mr..... as a representative of the  
leader and he is authorized to sign on behalf of the Joint  
Venture all documents and contracts related to tender  
no. ( / ) , and to represent the Joint Venture before  
all competent courts and non official bodies in all  
contractual, administrative , financial and legal issues

4- يسمي أطراف الائتلاف السيد ..... ممثلاً لرئيس الائتلاف  
ومفوضاً بالتوقيع نيابة عن الائتلاف على كافة الأوراق والعقود  
الخاصة بالعطاء رقم ( / ) وبتمثيل الائتلاف أمام المحاكم  
المختصة والدوائر الرسمية وغير الرسمية في كافة الأمور العقدية  
والإدارية والمالية والقضائية المتعلقة بالعطاء رقم ( / ) والعقد  
الخاص به .

related to tender No. (       /       ) and the contract pertaining thereto .

5- The parties to the Joint Venture have no right to terminate this agreement or substitute the leader's representative until the works awarded to them by the contract to this tender are completed and shall remain responsible before the employer until the works are finally taken over as per the conditions of taking over specified in the Tender / Contract documents .

6- This agreement is written in both Languages Arabic and English should any discrepancy in interpretation arise the Arabic text shall be considered the authentic.

5- لا يحق لأطراف الائتلاف أو أي طرف فيه فسخ الائتلاف فيما بينهم أو تبديل ممثل رئيس الائتلاف إلا بعد انتهاء الأشغال المحالة عليهم بموجب العقد الخاص بهذا العطاء وتكون مسنولياتهم تجاه صاحب العمل قائمه إلى حين تسليم الأشغال استلاماً نهائياً حسب شروط الاستلام المحددة في وثائق العقد / العطاء

6- حررت هذه الاتفاقية باللغتين العربية والإنجليزية في حالة نشوء أي اختلاف في تفسير أي من بنودها تعتبر لغة العقد المعتمدة هي اللغة العربية وملزمة للطرفين

الطرف الثالث

الطرف الثاني

الطرف الأول

Third Party

Second Party

First Party

توقيع الشخص المخول بالتوقيع  
قانونياً

.....

.....

.....

Signature of the  
Authorized Personnel

.....

.....

.....

الخاتم المعتمد  
Seal

Notary Public Certification

تصديق كاتب العدل