Republic of the Philippines
Office of the Solicitor General
134 Amorsolo St., Legaspi Village, Makati City

Technical Working Group for
Information and Communications Technology

TERMS OF REFERENCE

Procurement and Subscription of a 1-year Cloud and Server Virtualization Software with On-site Support Services

Background:

The Office of the Solicitor General is working on a transformative initiative to strengthen its current virtual assets and update its virtualization software to refresh its Virtual Machine capacity. With this endeavor, the OSG's physical servers and storage infrastructure will have more operational flexibility when managing various server operating systems (such as Linux and Windows). By managing virtual assets and embracing the benefits of virtualization, the OSG intends to boost operational performance, reduce hardware expenses, and simplify IT administration operations.

The OSG intends to utilize this upgrade to leverage the capabilities of virtual machines, creating virtualized environments that closely resemble actual hardware while supporting multiple operating systems simultaneously. The OSG aims to simplify infrastructure management by consolidating multiple server operating systems into these virtual environments, enabling faster responses to new issues and emerging technology trends. This tactical decision illustrates the Office's commitment to staying on the cutting edge of technological breakthroughs in computing and virtualization, and it represents a significant advancement in the Office's technological capabilities.

Objective:

The Office of the Solicitor General (OSG) is seeking a service provider to deliver twelve (12) months of cloud and server virtualization software with on-site support services. This requirement underscores the OSG's commitment to ensuring the seamless operation and performance of its virtualized infrastructure, encompassing both server and storage systems. The selected provider will play a crucial role in ensuring the efficiency and reliability of the OSG's virtual assets throughout the designated maintenance period.

The allotted budget is intended to cover the costs associated with software maintenance, technical assistance, and potential enhancements, ensuring that the OSG's virtualization software remains up-to-date and fully functional, meeting the dynamic demands of its operations.

Terms:

1. *Scope.* - Subscription to Cloud and Software Virtualization Software.

2. *ABC.* - The Approved Budget for the Contract (ABC) is **Five Million and Five Hundred Thousand Pesos (₱5,500,000.00)**, inclusive of all government taxes, charges, and other standard fees.

ICT SUBSCRIPTION			
ITEM	**QTY**	**UNIT COST**	**TOTAL**
Subscription to 1-year cloud and server virtualization software (180 cores) and 2 units of Virtualization Management Platform (Centrally Managed) for various server clusters, with premium on-site support services. **(Coverage Date: 01-JAN-26 to 31-Dec-26)**	**1 Lot**	5,500,000.00	**5,500,000.00**
		TOTAL	**₱ 5,500,000.00**

3. *Schedule of Payment.* - To guarantee the performance by the winning bidder of its obligations under the contract, it shall post a performance security before the signing of the contract. The performance security shall be in an amount not less than the required percentage of the total contract price in any of the following forms and in accordance with the following schedule:

Form of Performance Security	Amount of Performance Security (Not less than the required % of the Total Contract Price)	Statement of Compliance
a) Cash or cashier's/ manager's check issued by a Universal or Commercial Bank.	**5%**	

b) Bank draft/ guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank; *however,* it shall be confirmed or authenticated by a Universal or Commercial Bank if issued by a foreign bank.	**5%**	
c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	**30%**	

TERMS OF PAYMENT	Statement of Compliance
All bid prices shall be considered as fixed prices and, therefore, not subject to price escalation during contract implementation.	
The supplier shall be paid in full, subject to deduction of applicable taxes, upon the issuance by the OSG of the corresponding Certificate of Acceptance as follows: • Within thirty (30) days from completion of the delivery and issuance of the Inspection and Acceptance Report by the OSG and submission of all other required documents, 95% of the contract price. • One (1) year from the issuance of the Inspection and Acceptance Report by the OSG - 5% of the contract price.	

4. *Qualifications of the Supplier*:

   a. The bidder must have completed, within the last five years from the submission date and receipt of at least one (1) single contract of a similar nature, amounting to at least twenty-five percent (25%) of the ABC.

      For a similar contract, the bidder must have completed at least one (1) contract for virtual machine software, cloud-based virtual platform, or management of any virtual containers within the last five years.

   b. The bidder shall submit a valid and current certification stating that the supplier is an authorized dealer with full support from the manufacturer.

c. The bidder must present Client Satisfaction Ratings for at least three contracts with government agencies or private organizations that are similar to this project.

d. The bidder must have at least one manufacturer-certified engineer for the brand being offered. A certificate is required as part of the technical component of the bid proposal.

e. The bidder must have a main or satellite office in or around Metro Manila and/or nearby provinces.

5. *Delivery* - 15 days upon receipt of the Notice to Proceed (NTP).

6. Applicable provisions of the Government Procurement Reform Act (RA No. 12009) and its Revised Implementing Rules and Regulations (RIRR) shall form part of the Terms of Reference.

Technical Specifications:

ITEM	SPECIFICATION / PARTICULAR	Statement of Compliance
	I. **Subscription of Server Virtualization Software**	
1.	Subscription of 1-year cloud and server virtualization software with on-site support services (180 cores) from coverage date: 01-Jan-26 to 31-Dec-26.	
2.	Must provide a flexible and simplified private cloud platform with public cloud extensibility. Full-stack Infrastructure as a Service (IaaS) solution that delivers software-defined compute, storage, networking, and management into a single solution.	
3.	Must have an integrated self-service infrastructure platform to deploy VMs/containers for developer agility.	
4.	Hardened platform offering built-in resilience, scaling, and clustering for non-stop operations.	
TECHNOLOGY		
5.	The proposed solution should be a software-defined IT infrastructure that virtualizes all the elements of conventional "hardware-defined" systems. The solution must be capable, at a minimum, of virtualized compute, storage, network, and security (Virtual Firewall, Bandwidth Manager, Load Balancer, and Security)	
6.	The management platform is integrated and distributed, not reliant on a single virtual or physical machine, which is more reliable.	
7,	Do not require installation of additional management software after deployment of the hypervisor to achieve basic web-based access to GUI, granular management, and easy operation.	
8.	Support correlated security service with an intelligent threat detection and response platform to automatically take actions (such as quarantine VM by distributed firewall, take snapshot for VM) against malicious activities that are detected by the security platform.	
COMPUTE		
9.	Provides a robust, production-proven, high-performance virtualization layer.	
10.	Allows cold migration of virtual machines from one hypervisor host server to another, where the hosts exist across different virtual switches.	
11.	Provides secure access and account management.	

12.	The solution must be able to convert Virtual Machine formats such as VMDK, VHD, VHDX, QCOW2, and QEMU, done via agent or agentless.	
13.	Should have High Availability. In case the server fails, all the VMs running on that host can be recovered to another clustered host to ensure business continuity.	
14.	Should have built-in back-up and support agent-less incremental VM-level back-up. For Windows VMs, file-level recovery must be supported without using 3rd Party solutions.	
15.	Support snapshot consistent group and scheduled snapshots.	
16.	Able to evaluate the performance of virtual machines and hot-add resources (vCPU and vRAM) when they are running out of CPU or memory, minimizing business downtime.	
17.	Support host health monitoring, when a host is deemed unhealthy, it will be put in an unhealthy host list, and VM placement and HA failover will avoid using the unhealthy host as a destination. When the host is back to normal, it can be taken out of the unhealthy host list automatically.	
STORAGE		
18.	Supports data reconstruction to intelligently protect business performance and can intelligently limit the data reconstruction speed to avoid IO performance occupation during the data reconstruction process from affecting business performance.	
19.	Support disk bad sector prediction, scanning, and repair to maximize data security.	
20.	Support storage capacity prediction based on historical usage statistics and consumption behavior.	
21.	Support disk remaining lifecycle prediction.	
NETWORKING		
22.	Natively supports deploying virtual routers, virtual switches and firewalls.	
23.	Built-in distributed firewall to apply granular access control policy between VMs, securing east-west traffic (also known as Micro-segmentation).	
24.	The virtual router supports high availability. A failed virtual router can be automatically recovered upon host failure, to ensure high availability of the 0routing service.	
25.	Visualized Network topology can be completed simply by dragging objects and drawing connections via a visualized web-based management panel.	
SECURITY		

26.	Considering the network security of cloud platforms, cloud platforms need to have built-in distributed seven-layer network attack protection capabilities. Support enabling network protection functions for specified virtual machines, batches of virtual machines, specified IP addresses, and specified IP ranges based on virtual machines, and do not invalidate security capabilities due to IP address changes or migrations	
27.	To avoid additional economic losses and simplify the complexity of handling security issues, the cloud platform needs to provide a reliable guided ransomware virus processing process, including emergency isolation, retaining the status, restoring the cloud host, scanning for viruses, and restoring the network. It also supports pre-ransomware virus protection, automatic snapshots of virtual machines during suspected ransomware detection, and post-ransomware virus guided processing	
28.	To facilitate the flexible expansion of subsequent business virtual machines, secure virtualization authorization is required to support authorization based on the number of CPUs	
MANAGEMENT		
29.	Operations: Performance Optimization, Capacity Management, Compliance, Monitoring and Troubleshooting, Log Analytics	
30.	Automation: Automated Lifecycle Management, App/Infra Provisioning, Governance	
CONTINUOUS DATA PROTECTION		
31.	The solution must include license-activated Continuous Data Protection (CDP) to support second-level data protection.	
32.	Continuous Data Protection (CDP) must support recording VMs' IOs at an interval as minimum as 1 second, and data can be restored at any point in time in the past 3 days.	
33.	Continuous Data Protection (CDP) must be agentless to avoid any negative impact on VMs' stability and performance.	
CERTIFICATION		
34.	To ensure the maturity of the Hyper-converged Infrastructure solution, the vendor must be CMMI L5 certified.	
35.	To ensure it's at par with international security standards, the proposed solution vendor must have the below ISO certifications: - ISO 9001: Quality Management System Certification - ISO 20000-1: IT Service Management System Certification	

	- ISO 27001: Information Security Management Certification - ISO 27701: Privacy Information Management Certification	
36.	Vendor must be included in the Gartner Magic Quadrant for Hyperconverged Infrastructure	
	II. Software Deliverables for a period of 12 months	
1.	The bidder must provide a 1-year cloud and server virtualization software (180 cores) subscription with the above specifications.	
2.	The bidder must provide 2 units of Virtualization Management Platform (Centrally Managed Server).	
3.	The bidder should provide software maintenance and technical support for 12 months as outlined below.	
	III. Software Maintenance and Technical Support for a period of 12 months	
1.	The bidder must have a 24/7 helpdesk phone and email technical support with a response time of 30 minutes or less for incidents related to the Software Licenses listed in the technical requirements.	
2.	The bidder must provide 24/7 onsite technical support with a two (2) hour response time for critical incidents. Critical incidents are defined as incidents that prevent OSG from successfully providing IT services due to the failure of systems running on software.	
3.	The bidder should address an unlimited number of support requests escalated by OSG.	
4.	The bidder must provide on-site support for installing and deploying software patches and version upgrades.	
5.	The bidder must provide access to the Virtual Machines portal for downloading the latest product contents, patches, and updates/upgrades, including extensive online self-help resources and a knowledge base. Advice on patches and fixes shall also be provided.	
6.	The bidder must provide unlimited corrective maintenance activity (if applicable) and must meet the following conditions: • Twenty-four (24) hours by seven (7) days of support during the contract duration • Thirty (30) Minutes response time for phone and email, and 2 hours response time for on-site support • Root cause analysis for all support cases filed	
7.	The bidder must submit the service report within five (5) calendar days after rendering the service.	
8.	The bidder must provide complete documentation for the Activity Plan on installing patches and upgrades, and Root Cause Analysis for incidents encountered.	

9.	The bidder must provide a procedure for support and problem escalation.	
10.	The bidder must conduct system health checks every quarter. • System/ Application patches, fixes, security patches, and alerts • System/ Application profile • Resource utilization • Log analysis • Formal reports on the output of the conducted health check Submission of the health check report within five (5) calendar days after rendering the service.	
11.	The bidder must provide a certificate for the above services as part of the technical requirements.	
	IV. Migration	
1.	If a new virtualization solution is introduced, the winning bidder will be responsible for managing the migration process from the existing OSG virtualization environment to the new virtualization platform. The bidder will initially assess the current infrastructure, develop a detailed migration plan, and ensure the new system is configured and optimized for a seamless transition.	
2.	The winning bidder will perform test migrations to verify functionality, followed by the full migration of all virtual machines (VMs). This process will be carried out with minimal disruption, and any issues encountered during the migration will be promptly addressed.	
3.	The winning bidder must also maintain data integrity and system availability throughout the process.	
4.	Upon completion, the winning bidder will provide comprehensive documentation on the new system and offer training to familiarize relevant staff with the new platform. All necessary post-migration optimizations will be performed to ensure the system operates efficiently. The bidder will be fully accountable for the success of the migration and the stability of the new environment.	
5.	The winning bidder is only allowed an additional fifteen (15) days for the platform migration and five (5) days for the training and familiarization of the CMS staff on the new virtualization platform.	

Technical Working Group for ICT Subscriptions

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