	• Confirmation that preventive or corrective actions have resolved previously reported issues.
17.3	**WARRANTIES AND GUARANTEES** The winning bidder will provide the following: 1. Three (3) year warranty on parts and services for equipment and software in the technical specifications. 2. If during the warranty period, the equipment is deemed irreparable contractor shall provide brand new unit as a replacement with no cost to PPA. 3. Ensure that all critical security advisories, firmware updates, and software patches recommended by the manufacturer are evaluated and applied during the warranty period, without additional cost to PPA. 4. Ensure that the latest software version of the proposed solution installed prior to the expiration of the three (3)-year warranty and subscription period shall remain fully functional and usable by PPA thereafter, without requiring any renewal, subscription, license fee, or additional cost. 5. Must guarantee the storage platform's minimum 5:1 data reduction ratio (see Item 3, Enterprise External Storage). Within the three (3)-year warranty period, should the guaranteed ratio not be met, PPA shall be entitled to one (1)-time delivery of additional capacity, free of charge, to meet the guaranteed ratio. 6. If the equipment is to be relocated, relocation and recommissioning must be carried out by the winning bidder without any extra cost to PPA. 7. Indemnify the project owner from and against all liabilities from damages arising from injuries or disabilities to persons, or damages to property occasioned by any or omission of the contractor, or any of his subcontractors, including any and all legal expenses or otherwise. 8. All delivered equipment must be compatible and interoperable with the PPA's existing equipment. 9. The winning bidder must address every incident encountered promptly in accordance with the Service Level Agreement as follows: a. Must include 24x7 on call technical support for problems related to contracted services. b. Onsite support must be provided immediately when the issue was first reported. c. If an incident happens during off-hours duty, remote support must be provided within one (1) hour from when the issue was first reported. d. If the issue has not been remotely resolved, on-site support must be provided within the first two (2) hour period following discovery/report. e. The winning bidder must provide the needed repair services and parts services within the first four (4) hours when the issue has been raised.

	10. Minimum 48 hrs. advanced notification before scheduled maintenance such as firmware updates, software updates etc. 11. Spare parts or components shall be supplied as promptly as possible, but in any case, within seven (7) days from placing the order. 12. Must have one (1) full-time technical personnel assigned at the PPA Head Office in Metro Manila for support and maintenance of the entire system. Additionally, the assigned personnel will report to the office from Monday to Friday from 8AM – 5PM. 13. There must be a back-up personnel in case the full-time personnel are on leave or during weekends/holidays and off-hours. 14. Provide the necessary equipment, cables, and other components to successfully install, maintain, monitor, and manage the entire network.
17.3(c)	Not applicable.
17.4	No further instructions.
17.5	No further instructions.
20.2	Not applicable.
21.1	If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity

Section VI. Schedule of Requirements

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description[1]	Quantity	Total	Delivery Schedule
	SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SERVERS			Within two hundred and forty (240) calendar days from the receipt of Notice to Proceed (NTP). Upon completion of the license registration, installation, and configuration of the software, PPA shall issue a Certificate of Acceptance

[1] Subject to the Technical Specifications of the Terms of Reference

Section VII. Technical Specifications

Technical Specifications

Item	Specification	Statement of Compliance
		Bidders must state "Comply" or "Not Comply" for each specification and provide the corresponding performance parameters for offered equipment. *Each response must be supported by a clear documentary support in the bid and properly cross-referenced. Acceptable evidence includes unaltered manufacturer sales brochures, official specification sheets, product samples, independent test results, and similar documents.* *Claims should be backed by documentary support. If the evidence contradicts the claim, the bid may be rejected. Any*

		false statement—whether in the compliance form or supporting documents—found during evaluation, post-qualification, or contract implementation may be considered fraudulent in accordance with ITB Clause 3.1(a)(ii) and without prejudice to the imposition of appropriate administrative, civil, and criminal penalty in accordance with law.
	SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SERVERS	
	SCOPE OF WORK	
	The winning bidder's scope of work shall include, but is not limited to, the following: 1. Supply, delivery, installation, configuration, and commissioning of all hardware, software, and accessories required for a fully operational Enterprise Servers. 2. Testing and commissioning of Enterprise Servers to ensure full functionality, redundancy, and compliance with specifications. 3. Installation, configuration, and validation of the Production and Disaster Recovery (DR) clusters, including migration and replication setup. 4. Supply, delivery, installation, configuration and commissioning of Top of Rack Switches for Production and DR clusters. 5. Supply, Delivery, Installation and Commissioning of one (1) bare metal server. 6. Integration of the Enterprise Server Infrastructure with the existing PPA network and related systems, where applicable.	

7. Submission of complete system documentation, including configuration diagrams, licenses, and warranties.
8. Conduct quarterly Preventive Maintenance for the duration of the contract
9. Submit the following reports:
   - Quarterly Preventive Maintenance Report
   - Incident/Corrective Maintenance Report (for server failures, repairs, or replacement activities)

TECHNICAL SPECIFICATIONS

1. **Item/Description: Server for Production Site, complies with the following minimum requirements:**

No. of Nodes/Servers	Minimum of 3 nodes/server
Form Factor	2U form factor
CPU and Cores	Minimum of 2 CPU per node with 16 cores @ 2.3GHz (32 cores per node; 96 cores total)
RAM	512 GB DDR5-6400MT/s RAM per node (1,536 GB total)
Boot/System Storage	Internal mirrored (RAID 1) M.2 NVMe boot device; diskless configuration with no local data drives — workload data is served by the external storage platform (see Item 3, Enterprise External Storage).
Network Connectivity:	2x dual port 10/25GbE SFP28 network card per node with transceivers
	1x dual port 10/25GbE BASE-T network card per node
Redundancy	Redundant power supplies and cooling fans per chassis should be included for increased reliability.

2. **Item/Description: Server for Disaster Recovery Site, complies with the following minimum requirements:**

No. of Nodes/Servers:	Minimum of 3 nodes/server
Form Factor:	2U form factor

CPU and Cores:	Minimum of 2 CPU per host with 16 cores @ 2.3GHz (32 cores per node; 96 cores total)
RAM:	256 GB DDR5-6400MT/s RAM per host (768 GB total).
Boot/System Storage:	Internal mirrored (RAID 1) M.2 NVMe boot device; diskless configuration with no local data drives — workload data is served by the external storage platform (see Item 3, Enterprise External Storage).
Network Connectivity:	2x dual port 10/25GbE SFP28 network cards with transceivers
	1x dual port 10/25GbE BASE-T network cards
Redundancy:	Redundant power supplies and cooling fans per chassis should be included for increased reliability.

3. Item/Description: Enterprise External Storage, complies with the following minimum requirements:

No. of Storage Appliances	Minimum of 2 independent storage appliances — one deployed at the Production Site and one at the Disaster Recovery Site.
Number of Controllers	Minimum of 2 active-active controllers per Storage Appliance
Capacity	Minimum of 76.8 TB raw NVMe SSD capacity per appliance, delivering a minimum of 52.81 TiB usable capacity and 211.26 TiB effective capacity per appliance at a 4:1 data reduction ratio.
RAM	Minimum of 96 GB per controller (192 GB per appliance)
Network Connectivity	1x 25GbE optical 4-port network card pair per controller
	1x 25GbE optical SFP transceiver pair per controller
Storage Architecture:	Provide a unified platform for block and file storage.
	Should be an end-to-end NVMe-based, scale-out, active-active architecture designed for 99.9999% availability with no single point of failure.

	Support mixing of different storage models within the same scale-out cluster.
	Support NVMe-based flash drives with an end-to-end NVMe architecture.
	Support mixing of different capacities of SSDs in a single storage pool, and must support single-drive scaling.
	Support NVMe/IP (NVMe over IP) using 25GbE SFP28.
Data Services:	Support Thin Provisioning, inline Compression and Deduplication, Replication, and Snapshots.
	Capable of identifying and reporting unreducible block data.
	Support Block Quality of Service (QoS) policies to ensure consistent delivery of storage performance to critical applications.
Management & Support:	Must have native storage management software with a web-based GUI capable of generating customized reports, real-time monitoring, historical performance data for analysis and trending, and capacity utilization monitoring.
	Must have a call-home function for proactive health monitoring throughout the entire active maintenance period.
	Include an AI-enabled, cloud-based operations management service subscription throughout the entire active maintenance period at no additional cost.
Support Agreement	Minimum 3-year hardware and software support agreement, with 24x7 maintenance and technical support (telephone, email, and web).

4. Item/Description: Automation Platform / Orchestrator Server, complies with the following minimum requirements:

No. of Nodes/Servers	Minimum of 2 nodes/server
Form Factor	Rackmount (1U)

	CPU and Cores	Minimum of 1 CPU per node with 16 cores @ 2.3GHz (16 cores per node; 32 cores total)	
	RAM	Minimum of 64 GB DDR5-6400MT/s RAM per node (128 GB total)	
	Storage	Minimum of 7.68 TB SSD per node (RAID 1) for platform OS and orchestrator data (15.36 TB total)	
	Network Connectivity	1x dual-port 10GbE BASE-T network card per node	
		2x dual-port 25GbE SFP28 network card per node	
	Redundancy	Redundant power supplies and cooling fans per chassis should be included for increased reliability.	
	Automation Platform Software:	Provide a centralized portal for infrastructure visibility, orchestration, and lifecycle management.	
		Provide automated deployment using repeatable templates or blueprints.	
		Support Day-1 deployment and Day-2 lifecycle operations.	
		Support compute infrastructure onboarding.	
		Support enterprise storage platform onboarding and management integration.	
		Support secure device onboarding.	
		Support role-based access control and user administration.	
		Support integration with enterprise identity providers.	
		Secure communications using industry-standard encryption and certificates.	
		Provide audit logging and configurable log retention.	
		Support API-based automation.	
		Support proxy-based connectivity for secure enterprise environments.	
		Support Kubernetes-based deployment.	
		Support license and entitlement management.	
		Support validated infrastructure and software outcomes.	
		Support customer-created automation workflows.	

Licensing	Orchestrator license valid for at least one (1) instance with a total of 6 nodes for both Prod and DR, with a minimum 3-year subscription term.

5. Item/Description: Server Software, complies with the following minimum requirements:

On-Premises Cloud Platform Solution:	Must be a private cloud / hyperconverged-class virtualization platform, deployable on-premises with support for a disaggregated compute and external storage architecture, as defined by Philippine Ports Authority.
	The platform must be in the Leader's Quadrant of the latest Gartner Distributed Hybrid Infrastructure Magic Quadrant.
	Must have a support agreement for hardware and software components for 3 years.
	Must include 24x7x365 maintenance and support for all hardware and software components of the proposed solution, including updates and patches as well as technical support available via telephone, email, and web during all hours (24 hours per day, 365 days per year).
	Leverage a complete software-based solution so that all intelligence of managing the hardware is based on software-defined approach.
	Support scaling up (eg. memory) and scaling out (eg. adding more nodes into the cluster).
	Work with commodity 10 GbE low latency network switches and should not have dependency on any specific brand networking solution.
	Support different generations of hardware within the same cluster as more nodes are added over

			time. The server models need not be of the same resource configuration from a storage, memory, and CPU perspective. This should include different CPU generations up to 3-generation gap from initial setup depending on the hardware manufacturer.	
			Support multiple hypervisors like VMware ESXi and enterprise grade, fully supported KVM-based hypervisor like Nutanix AHV.	
			Provide high-availability functionality with automatic failover to minimize disruptions & downtime of workloads due to any unplanned hardware failure or planned maintenance for applying hardware upgrades / software updates etc. It must also provision for automatic movement of workloads to minimize disruption during planned maintenance cycles.	
			Monitor the health status of any and all clusters with similar hyperconverged software and send out alerts for any issue and abnormality detected to the management dashboard.	
		On-Premises Cloud Platform Unified Management Console	Enable ease of use, so that upgrade of the core software, firmware and hypervisor are completely handled through the same console and leverage only a few clicks via a 'Life Cycle Management' (LCM) platform level construct.	
			Support built-in analysis capabilities to analyze and compare workload/VM performance with different metrics encompassing CPU and memory utilization, and network performance, across different HCI clusters through the unified management console.	
			Support future integration and development work (eg. DevSecOps), it must support an API for all functions available in the Management UI, so that automation can be used to operate the platform.	

	Include a network visualization page that shows a diagram of which hosts specific VMs are running on and which network ports the hosts are connected to. This should help in tracing resources during audit and troubleshooting activities.
On-Premises Cloud Platform Security	Ensure continuous security compliance. It should be able to provide full details of the security baseline to address various vulnerability assessments and lock downs done on the components within the platform.
	Must have Role-Based Access Control (RBAC) where users are assigned to specific roles in the organization and each role will have a set of defined permissions.
	Must be validated to FIPS-140-2 compliance.
	Must have Common Criteria security certification.
On-Premises Cloud Platform Data Protection and Disaster Recovery	Provide the basic ability to support 'snapshotting' of VM-based applications reflected as 'Recovery Points'.
	Support 'DR Failover' by way of using Recovery Points to secondary site(s) based on the concept of "Availability Zones" (AZs) such that VMs/Workloads at a holistic application level in AZs that can failover to each other.
	Support native replication capabilities for Synchronous (RPO=0sec), Near-Sync (1 min < RPO < 15 min) and Async (RPO > 1 hr) replication frequencies.
	Support configuration of DR Orchestration via the centralized management console.

6. Item/Description: Top of the Rack Switch, complies with the following minimum requirements:

General Requirements	
Quantity	4

	Minimum of forty-eight (48) 25 Gbps SFP+ ports with at least four (4) QSFP28 100 Gbps ports.
	Minimum of 1.08 Tbsp. (2.16 Tbps full duplex) switching capacity.
	At least throughput of 1.5 Bpps (3.0 Bpps full duplex) – Bpps (Billion packets per second)
	A flash memory capable of storing running and startup configurations.
	Shall have Out-of-band management (RJ45 console/management port with RS232 signaling).
	Support QoS configuration.
	Support IPv6.
	Supports Open-source Open Network Install Environment (ONIE) for zero touch installation as well as of alternative network operating systems.
	Shall have power-efficient operation and have a fresh air 2.0 compliant of up to 45°C.
	VXLAN gateway functionality supports bridging and routing the non-virtualized and the virtualized overlay networks with line rate performance
	L2 multipath support via Virtual Link Trunking (VLT) and Routed VLT support
	Routable RoCE to enable convergence of compute and storage on Leaf/Spine Fabric

7. Item/Description: Bare metal Server for Disaster Recovery, complies with the following minimum requirements:

Quantity	1
Form Factor	Rackmount (1U)
Processor & Chipset	Server-grade processor with at least 16 physical cores / 32 threads, 2.3 GHz.
Memory	2x 64GB RDIMM, 6400MT/s, Dual Rank (128 GB total)

		Storage Capacity	4x 3.84TB SATA SSD Read Intensive, RAID 5 (15.36 TB total)	
		Drive Bays	Up to 10 x 2.5-inch SAS/SATA (HDD/SSD) hot-plug drive bays (4 Universal bays)	
		I/O Ports	Dedicated iDRAC Management Ethernet Port	
		Network Interface	1x Dual-Port 10GbE BASE-T OCP3 Network Adapter	
			1x Dual-Port 25GbE SFP28 Network Adapter	
		Power	100-240 VAC, Dual, Redundant (1+1), Hot-Plug Power Supply, 800W	
		System Management	The management software shall have the following features:	
			• Discovery and Inventory.	
			• Server initiated discovery	
			• Firmware update including baseline management with Update Manager Plugin.	
			• In-band driver compliance and update.	
			• Monitoring and Alerting	
			• REST API.	
			•Automated, proactive issue detection and case creation	
			• Predictive failure prevention	
		Mounting Kit	Manufacturer's Standard	
		Security	TPM 2.0	
			Cryptographically Signed Firmware	
			Secure Boot	
			Silicon Root of Trust	
			System Lockdown	
			Secured Component Verification	
			Secure Enterprise Key Manager License 3.0	
	VII. BIDDER'S QUALIFICATIONS 1. The bidder must be an authorized reseller of the server and software equipment to be supported by a certificate issued by the manufacturer/distributor. 2. The bidder must have completed a Single Largest Completed Contract (SLCC) similar to the contract to be bid for the last five (5) years whose value must be at least equivalent to fifty percent (50%) of the ABC. "Similar contract" means any Supply, Delivery, Installation, Configuration and Commissioning of Network or Servers.			

A certificate of completion of the project must be provided in the technical proposal.

3. The bidder must have been in business operations for at least ten (10) years. Copy of business permits covering the last ten (10) years must be included in the Technical Proposal.
4. The bidder must have at least five (5) licensed Electronics Engineers (ECE), inclusive of a Professional Electronics Engineer (PECE), and Project Manager (PM) with all designated personnel meeting the applicable qualification and experience requirements.

Position / Designation	Qty	Minimum Years of Employment	Documentary Proof	Counted Within 5 ECE
Project Manager (PM)	1	At least 3 years	Project Management Certification	Yes
Electronics Engineer	3	At least 3 years	Valid ECE License	Yes
Professional Electronics Engineer (PECE)	1	At least 10 years	Valid PECE License	Yes

Certificate of Employment, Company ID, and License must be submitted during the opening of bids.

TRAINING/KNOWLEDGE TRANSFER

1. The winning bidder must provide free classroom training to fifteen (15) technical personnel on the installation, configuration, management, monitoring and maintenance of the solution. The training shall have a minimum duration of sixteen (16) hours and will be conducted after the delivery and commissioning of all equipment. A Certificate of Completion must be provided after the training has been completed.
2. Submit the following documents
   - Training Syllabi and Materials
   - Installation, Troubleshooting, Monitoring and Management Procedure Manual.
3. The winning bidder shall shoulder all expenses (parking, venue, meals, etc.) during the training.

All other provisions stated in the Terms of Reference not included herein

Section VIII. Philippine Bidding Document Related Forms

Bid Form for Procurement of Goods

[Note: The duly accomplished form shall be submitted with the Bid]

BID FORM

Project Identification No.: *[Insert number]*

To: [Name of Procuring Entity]

Having examined the Philippine Bidding Documents (PBD) including the Supplemental Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

a) I/We have no reservation to the PBD, including the Supplemental Bid Bulletins, for the Procurement Project [Project Title];

b) I/We undertake to deliver the Goods in accordance with the delivery schedule in the Schedule of Requirements;

c) The total price of our Bid in words and figures, excluding any discount offered below, is *[insert information]*

d) The discounts offered and the methodology for their application, if any, are: *[insert information];* or indicate N/A if no discount offered]

e) The total bid price in words and figures, after applying the applicable discount, includes the cost of all taxes, such as, but not limited to *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized in the *[Select one, delete the other:* the Price Schedules/ Detailed Estimates].

f) This Bid shall remain valid within a period stated in the PBD, and it shall be binding upon me/us at any time before the expiration of that period;

g) If our bid is accepted, I/we commit to enter to a contract and provide a performance security in the form, amounts, and within the times prescribed in the PBD, and hereby acknowledge the consequences under the IRR of RA No. 12009 on forfeiture of Bid Security or enforcement of Bid Securing Declaration and on Blacklisting.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon the Bidder.

I/We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

I/We certify/confirm that we comply with the eligibility requirements pursuant to the PBD.

The undersigned is authorized to submit the bid on behalf of [Name of the Bidder] as evidenced by the attached [State the Written Authority].

I/We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Signature over Printed Name]
[Position/Designation]
[Date]

Price Schedule for Goods

Name of Bidder _____. Project ID No. _____. Page _ of _____

Pricing Details for Goods Offered from Within the Philippines

1	2	3	4	5	6	7	8	9	10
Item	Description	Source of Domestic Product, as certified by the Relevant Agency	Quantity	Unit price exw per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)

Summary of Bid Prices

The Procuring Entity may modify the table below as necessary to comply with the requirements of the Procurement Project.

1	2	3	4
Item No.	Item	Particulars / Description	Total Amount

Name: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Price Schedule for Goods

Name of Bidder _____. Project ID No. _____. Page _ of _____

Pricing Details for Goods Offered from Abroad

1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)

Summary of Bid Prices

The Procuring Entity may modify the table below as necessary to comply with the requirements of a specific Project.

1	2	3	4
Item No.	Item	Particulars / Description	Total Amount

Name:_____

Signature:_____

Duly authorized to sign the Bid for and behalf of:_____

Contract Form

[Note: The duly accomplished form is not required to be submitted with the Bid but shall be submitted within ten (10) days after receiving the Notice of Award]

CONTRACT FOR [Insert Project Title]

This CONTRACT executed on the _____ day of _____ 20_____ by and between:

[Name of Procuring Entity], a government agency of the Republic of the Philippines, hereinafter called "the Entity";

-and-

[Name of Supplier /Contractor/ Consultant] a company duly organized and existing under the laws of [city and country], with principal office at [insert address], hereinafter called "the Supplier".

WHEREAS, the Entity invited Bids for certain goods and services/works/consulting services, particularly *[Brief description of Project]*;

WHEREAS, the Supplier/Contractor/Consultant submitted a responsive bid and was awarded the contract for the procurement in the total amount of *[Contract price in words and figures, including currency],* hereinafter referred to as the "Contract Price."

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereby agree as follows:

1. Unless otherwise stated, terms and expressions used in this Contract shall have the same meanings as those assigned to them in the Conditions of Contract, which form an integral part of this Contract.

2. The following documents as required by the Implementing Rules and Regulations of Republic Act No. 12009 shall form part and be read and construed as integral parts of this Contract, *viz.*:

    a. Philippine Bidding Document (PBD); *[Select one, delete the others]*

    - *For Procurement of Goods*

        i. Invitation to Bid;
        ii. Instruction to Bidders;
        iii. Bid Form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
        iv. Bid Data Sheet;
        v. Schedule of Requirements;
        vi. Technical Specifications;
        vii. General and Special Conditions of Contract;
        viii. Supplemental Bid Bulletins, if any; and

ix. Other contract documents that may be required by existing laws and/or the Entity.

- *For Procurement of Infrastructure Projects*

i. Drawings/Plans;
ii. Specifications;/Scope of Work;
iii. Bill of Quantities;
iv. General and Special Conditions of Contract; and
v. Supplemental Bid Bulletins, if any;

- *For Procurement of Consulting Services*

i. General and Special Conditions of Contract;
ii. Terms of Reference;
iii. Request for Expression of Interest;
iv. Instructions to Bidders;
v. Bid Data Sheet;
vi. Addenda and/or Supplemental/Bid Bulletins, if any;
vii. Bid forms, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents/ statements submitted (*e.g.*, bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
viii. Eligibility requirements, documents and/or statements;
ix. Performance Security;
x. Notice of Award of Contract and the Bidder's *conforme* thereto; and
xi. Other contract documents that may be required by existing laws and/or the Entity.

b. Winning bidder's bid, including the Eligibility Requirements, Technical and Financial Proposals, and all other documents or statements submitted;

c. Performance Security;

d. Notice of Award of Contract; and the Bidder's Conforme thereto; and

e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBD, such as but not limited to the Notice to Proceed and Warranty Security.

2. In consideration of the Contract Price of *[Contract Price in words and figures],* or such other sums as may be determined in accordance with the terms of the Contract, the Supplier/Contractor/Consultant agrees to deliver and perform the items and related services for the *[Project Title]* described herein in accordance with the terms and conditions specified in the Contract and its annexed documents.

3. The *[Name of the Procuring Entity]* agrees to pay the above-mentioned sum to the Supplier/Contractor/Consultant in accordance with the schedule and manner provided in the Bidding Documents and its annexes.

4. Any dispute, difference, or claim arising out of or relating to this Contract, including its existence, validity, interpretation, breach, or termination thereof, may be submitted to arbitration or other form of alternative dispute resolution in accordance with the

applicable law, such as Republic Act No. 9285 (Alternative Dispute Resolution Act of 2004) or Executive Order No 1008, series 1985 (Construction Industry Arbitration Law).

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

For the Procuring Entity	*For the Bidder*
Head of the Procuring Entity or Duly Authorized Representative	Duly authorized to sign the Contract for and behalf of *[Bidders Name]*:
[Signature over Printed Name] *[Position/Designation]* *[Date]*	*[Signature over Printed Name]* *[Position/Designation]* *[Date]*

Signed in the presence of:

[Name and Signature] *Witness – Procuring Entity*	*[Name and Signature]* *Witness- Supplier*

ACKNOWLEDGMENT

BEFORE ME, A Notary Public for and in the _____, City/Province of _____, this _____ day of _____, 20_____, personally appeared the above-named persons who have satisfactorily proven to me their identity, through their identifying documents written below their names and signatures, that they are the same persons who executed and voluntarily signed the foregoing instrument consisting of ____ pages, including this page where this Acknowledgement is written, which they acknowledged before me as their free and voluntary act and deed.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year].*

NAME OF NOTARY PUBLIC

Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

Omnibus Sworn Statement Form

[Note: The duly accomplished form shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

OMNIBUS SWORN STATEMENT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and with residence at [*Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. *Select one, delete the others:*

   - *If sole proprietorship:* I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[Address of Bidder]*;

   - *If partnership, corporation, cooperative, or joint venture:* I am the duly authorized and designated representative of *[Name of Bidder]* with office address at *[Address of Bidder]*;

   - *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* I am the individual consultant or authorized representative of *[Name of Bidder]* with office address at *[Address of Bidder]*;

2. ***Select one, delete the others:***

   - *If sole proprietorship:* As the owner and sole proprietor or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Project Title]* of the *[Name of the Procuring Entity][insert* "as supported by the attached duly notarized Special Power of Attorney" *for authorized representative]*;

   - *If partnership, corporation, cooperative, or joint venture:* I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Project Title]* of the *[Name of the Procuring Entity]*, as supported by the attached duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable*;*

   - *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* As the individual consultant or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Project Title]* of the *[Name of the Procuring Entity]*, as supported by the attached duly notarized Special Power of Attorney *for authorized representative*;

3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board; by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity;

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *Select one, delete the others:*

   - *If sole proprietorship :* The *[Name of Bidder]* and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

   - *If partnership :* The partnership itself and the partners of *[Name of Bidder]* are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

   - *If cooperative:* The cooperative itself and members of the board of directors, general manager, or chief executive officer of *[Name of Bidder]* are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

   - *If corporation, or joint venture:* The corporation or joint venture itself, and officers, directors, and controlling stockholders of *[Name of Bidder]* are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

   - *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* The individual consultant and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

7. It is understood that failure to faithfully disclose its relationship with the Head of the Procuring Entity, members of the BAC, the TWG, and the BAC Secretariat, the head of the PMO or the end-user unit or implementing unit, and the project consultants of the Procuring Entity, or of the procurement agent by consanguinity or affinity up to the third civil degree, as well as its submission of beneficial ownership information containing false entries shall be subject to blacklisting under Section 100 of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009, without prejudice to criminal and civil liabilities under applicable laws, including their accessory penalties, if any.

Select one, delete the rest:

- *In case of corporations: [Name of Bidder]* declares its beneficial ownership information consistent with its updated General Information Sheet or Beneficial Ownership Declaration Form or any other document duly submitted to the SEC and has maintained a valid and updated file therein in compliance with Sections 20.2.9.1, 81, and 82 of the IRR of RA No. 12009.

- *In case of Foreign Bidders: [Name of Bidder]* submitted an appropriate equivalent document in English issued by the country of the bidder concerned in accordance with Section 20.2.9.2 of the IRR of RA No. 12009.

8. *[Name of Bidder]* complies with existing labor laws and standards; and

9. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:

    a) Carefully examine all of the Bidding Documents;

    b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;

    c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and

    d) Inquire or secure Supplemental Bid Bulletin(s) issued for the *[Project Title]*.

10. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

11. In case advance payment was made or given to *[Name of Bidder]*, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability under existing laws.

IN WITNESS WHEREOF, I have hereunto set my hand this __ day of ___, 20__ at _____, Philippines.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Affiant's Signature over Printed Name]
[Position/Designation]
[Date]

JURAT

SUBSCRIBED AND SWORN to before me this _____ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year].*

NAME OF NOTARY PUBLIC
Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____.

Bid Securing Declaration Form

[The duly accomplished form shall be submitted with the Bid if bidder opts to provide this type of bid security]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

BID SECURING DECLARATION

Project Identification No.: *[Number]*

To: *[Insert name of the Procuring Entity]*

I/We, the undersigned, declare that:

1) I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration;

   [Insert paragraph for Unsolicited Offer with Bid Matching]

   I/We understand that upon conferment of the original offeror status under Section 30.6 of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009, the offeror shall submit a Bid Securing Declaration within ten (10) days from the receipt of the certificate of conferment;

2) Select one, delete the other:

   - I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any Procuring Entity upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the Procuring Entity for the commission of acts resulting to the enforcement of the Bid Securing Declaration under Sections 52.2 (a), 63.2, 69.1 and 100, except 100.3 (c),of the IRR of Republic Act No. 12009; without prejudice to other legal action the government may undertake; and

3) I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:

   a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;

   b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;

   c) I am/we are declared the bidder with the Lowest Calculated Responsive Bid and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of *[month] [year]* at *[place of execution]*.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Signature over Printed Name]
[Position/Designation]
[Date]

JURAT

SUBSCRIBED AND SWORN to before me this _____ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____.

NET FINANCIAL CONTRACTING CAPACITY (NFFC) COMPUTATION

A. The values of the bidder's current assets and current liabilities shall be based on the data submitted to the BIR, through its Electronic Filing and Payment System (EFPS).

		Year 20__
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Net Worth (1-3)	
6.	Net Working Capital (2-4)	

B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = [(Current asset minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid

NFCC = Php _____

K = 15

Herewith attached are certified true copies of the income tax return and audited financial statement: stamped "RECEIVED" by the BIR or BIR authorized collecting agent for the immediately preceding year.

Submitted by:

_____
Name of Supplier/Distributor/Manufacturer

_____
Signature of Authorized Representative

STATEMENT OF THE BIDDER'S ONGOING GOVERNMENT AND PRIVATE CONTRACTS, INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED

This is to certify that _____ has the following ongoing government and private contracts, including contracts awarded but not yet started:

NAME OF THE CONTRACT	DATE OF THE CONTRACT	CONTRACT DURATION	OWNER'S NAME & ADDRESS	KINDS OF GOODS/ SERVICES DELIVERED	AMOUNT OF CONTRACT	VALUE OF OUTSTANDING CONTRACT	DATE OF DELIVERY

*PROOF OF CONTRACT TO BE PRESENTED AT POST-QUALIFICATION.

_____
Name and Signature of Authorized Representative

_____
Date

STATEMENT OF THE BIDDER'S SINGLE LARGEST COMPLETED CONTRACT (SLCC) SIMILAR TO THE CONTRACT TO BE BID

This is to certify that _____ has completed the following:

NAME OF THE CONTRACT	DATE OF THE CONTRACT	CONTRACT DURATION	OWNER'S NAME & ADDRESS	KINDS OF GOODS	AMOUNT OF COMPLETED CONTRACT/S	DATE OF DELIVERY	END USER'S ACCEPTANCE OR OFFICIAL RECEIPT(S) OR SALES INVOICE ISSUED FOR THE CONTRACT*

*TO BE ATTACHED TO THE STATEMENT

_____
Name and Signature of Authorized Representative

_____
Date

TERMS OF REFERENCE

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SERVERS

I. INTRODUCTION

The Philippine Ports Authority (PPA), in support of its mandate to ensure efficient, secure, and uninterrupted port and maritime operations, intends to strengthen its information and communications technology (ICT) infrastructure by implementing an enterprise-grade servers and data center interconnect solution for a government critical infrastructure facility.

The increasing reliance on centralized applications, data-driven operations, and mission-critical systems require a resilient, high-performance, and scalable network architecture. To address these requirements, the PPA plans to undertake the design, supply, installation, configuration, and commissioning of an enterprise core network and data center interconnect that will provide reliable, secure, and high-bandwidth connectivity across its data center environments.

This Terms of Reference defines the technical and functional requirements necessary to ensure the successful delivery of a secure, redundant, and high-availability enterprise network solution suitable for a government critical infrastructure facility.

II. OBJECTIVES

1. To establish a robust and unified infrastructure that integrates computing, storage, and networking resources through a hyperconverged platform.
2. To provide a highly available and scalable environment capable of supporting mission-critical applications.
3. To ensure business continuity and disaster recovery (DR) through synchronous or asynchronous data replication between the Production and DR sites.
4. To simplify infrastructure management through centralized software-defined controls and monitoring.
5. To ensure long-term support, maintainability, and interoperability with existing PPA Information Technology (IT) systems.

III. APPROVED BUDGET

The approved budget for the contract is Two Hundred Fifty Million Pesos (P250,000,000.00) inclusive of 12% VAT.

IV. SCOPE OF WORK

The winning bidder's scope of work shall include, but is not limited to, the following:

1. Supply, delivery, installation, configuration, and commissioning of all hardware, software, and accessories required for a fully operational Enterprise Servers.
2. Testing and commissioning of Enterprise Servers to ensure full functionality, redundancy, and compliance with specifications.
3. Installation, configuration, and validation of the Production and Disaster Recovery (DR) clusters, including migration and replication setup.
4. Supply, delivery, installation, configuration and commissioning of Top of Rack Switches for Production and DR clusters.
5. Supply, Delivery, Installation and Commissioning of one (1) bare metal server.
6. Integration of the Enterprise Server Infrastructure with the existing PPA network and related systems, where applicable.
7. Submission of complete system documentation, including configuration diagrams, licenses, and warranties.
8. Conduct quarterly Preventive Maintenance for the duration of the contract
9. Submit the following reports:
   - Quarterly Preventive Maintenance Report
   - Incident/Corrective Maintenance Report (for server failures, repairs, or replacement activities)

IX. TECHNICAL SPECIFICATIONS

1. Item/Description: Server for Production Site, complies with the following minimum requirements:

No. of Nodes/Servers	Minimum of 3 nodes/server
Form Factor	2U form factor
CPU and Cores	Minimum of 2 CPU per node with 16 cores @ 2.3GHz (32 cores per node; 96 cores total)
RAM	512 GB DDR5-6400MT/s RAM per node (1,536 GB total)
Boot/System Storage	Internal mirrored (RAID 1) M.2 NVMe boot device; diskless configuration with no local data drives — workload data is served by the external storage platform (see Item 3, Enterprise External Storage).
Network Connectivity:	2x dual port 10/25GbE SFP28 network card per node with transceivers
	1x dual port 10/25GbE BASE-T network card per node
Redundancy	Redundant power supplies and cooling fans per chassis should be included for increased reliability.

2. Item/Description: Server for Disaster Recovery Site, complies with the following minimum requirements:

No. of Nodes/Servers:	Minimum of 3 nodes/server

Form Factor:	2U form factor
CPU and Cores:	Minimum of 2 CPU per host with 16 cores @ 2.3GHz (32 cores per node; 96 cores total)
RAM:	256 GB DDR5-6400MT/s RAM per host (768 GB total).
Boot/System Storage:	Internal mirrored (RAID 1) M.2 NVMe boot device; diskless configuration with no local data drives — workload data is served by the external storage platform (see Item 3, Enterprise External Storage).
Network Connectivity:	2x dual port 10/25GbE SFP28 network cards with transceivers
	1x dual port 10/25GbE BASE-T network cards
Redundancy:	Redundant power supplies and cooling fans per chassis should be included for increased reliability.

3. Item/Description: Enterprise External Storage, complies with the following minimum requirements:

No. of Storage Appliances	Minimum of 2 independent storage appliances — one deployed at the Production Site and one at the Disaster Recovery Site.
Number of Controllers	Minimum of 2 active-active controllers per Storage Appliance
Capacity	Minimum of 76.8 TB raw NVMe SSD capacity per appliance, delivering a minimum of 52.81 TiB usable capacity and 211.26 TiB effective capacity per appliance at a 4:1 data reduction ratio.
RAM	Minimum of 96 GB per controller (192 GB per appliance)
Network Connectivity	1x 25GbE optical 4-port network card pair per controller
	1x 25GbE optical SFP transceiver pair per controller
Storage Architecture:	Provide a unified platform for block and file storage.
	Should be an end-to-end NVMe-based, scale-out, active-active architecture designed for 99.9999% availability with no single point of failure.
	Support mixing of different storage models within the same scale-out cluster.
	Support NVMe-based flash drives with an end-to-end NVMe architecture.

	Support mixing of different capacities of SSDs in a single storage pool, and must support single-drive scaling.
	Support NVMe/IP (NVMe over IP) using 25GbE SFP28.
Data Services:	Support Thin Provisioning, inline Compression and Deduplication, Replication, and Snapshots.
	Capable of identifying and reporting unreducible block data.
	Support Block Quality of Service (QoS) policies to ensure consistent delivery of storage performance to critical applications.
Management & Support:	Must have native storage management software with a web-based GUI capable of generating customized reports, real-time monitoring, historical performance data for analysis and trending, and capacity utilization monitoring.
	Must have a call-home function for proactive health monitoring throughout the entire active maintenance period.
	Include an AI-enabled, cloud-based operations management service subscription throughout the entire active maintenance period at no additional cost.
Support Agreement	Minimum 3-year hardware and software support agreement, with 24x7 maintenance and technical support (telephone, email, and web).

4. Item/Description: Automation Platform / Orchestrator Server, complies with the following minimum requirements:

No. of Nodes/Servers	Minimum of 2 nodes/server
Form Factor	Rackmount (1U)
CPU and Cores	Minimum of 1 CPU per node with 16 cores @ 2.3GHz (16 cores per node; 32 cores total)
RAM	Minimum of 64 GB DDR5-6400MT/s RAM per node (128 GB total)
Storage	Minimum of 7.68 TB SSD per node (RAID 1) for platform OS and orchestrator data (15.36 TB total)
Network Connectivity	1x dual-port 10GbE BASE-T network card per node
	2x dual-port 25GbE SFP28 network card per node

Redundancy	Redundant power supplies and cooling fans per chassis should be included for increased reliability.
Automation Platform Software:	Provide a centralized portal for infrastructure visibility, orchestration, and lifecycle management.
	Provide automated deployment using repeatable templates or blueprints.
	Support Day-1 deployment and Day-2 lifecycle operations.
	Support compute infrastructure onboarding.
	Support enterprise storage platform onboarding and management integration.
	Support secure device onboarding.
	Support role-based access control and user administration.
	Support integration with enterprise identity providers.
	Secure communications using industry-standard encryption and certificates.
	Provide audit logging and configurable log retention.
	Support API-based automation.
	Support proxy-based connectivity for secure enterprise environments.
	Support Kubernetes-based deployment.
	Support license and entitlement management.
	Support validated infrastructure and software outcomes.
	Support customer-created automation workflows.
Licensing	Orchestrator license valid for at least one (1) instance with a total of 6 nodes for both Prod and DR, with a minimum 3-year subscription term.

5. Item/Description: Server Software, complies with the following minimum requirements:

On-Premises Cloud Platform Solution:	Must be a private cloud / hyperconverged-class virtualization platform, deployable on-premises with support for a disaggregated compute and external storage architecture, as defined by Philippine Ports Authority.
	The platform must be in the Leader's Quadrant of the latest Gartner Distributed Hybrid Infrastructure Magic Quadrant.

	Must have a support agreement for hardware and software components for 3 years.
	Must include 24x7x365 maintenance and support for all hardware and software components of the proposed solution, including updates and patches as well as technical support available via telephone, email, and web during all hours (24 hours per day, 365 days per year).
	Leverage a complete software-based solution so that all intelligence of managing the hardware is based on software-defined approach.
	Support scaling up (eg. memory) and scaling out (eg. adding more nodes into the cluster).
	Work with commodity 10 GbE low latency network switches and should not have dependency on any specific brand networking solution.
	Support different generations of hardware within the same cluster as more nodes are added over time. The server models need not be of the same resource configuration from a storage, memory, and CPU perspective. This should include different CPU generations up to 3-generation gap from initial setup depending on the hardware manufacturer.
	Support multiple hypervisors like VMware ESXi and enterprise grade, fully supported KVM-based hypervisor like Nutanix AHV.
	Provide high-availability functionality with automatic failover to minimize disruptions & downtime of workloads due to any unplanned hardware failure or planned maintenance for applying hardware upgrades / software updates etc. It must also provision for automatic movement of workloads to minimize disruption during planned maintenance cycles.
	Monitor the health status of any and all clusters with similar hyperconverged software and send out alerts for any issue and abnormality detected to the management dashboard.
On-Premises Cloud Platform Unified Management Console	Enable ease of use, so that upgrade of the core software, firmware and hypervisor are completely handled through the same console and leverage only a few clicks via a 'Life Cycle Management' (LCM) platform level construct.

	Support built-in analysis capabilities to analyze and compare workload/VM performance with different metrics encompassing CPU and memory utilization, and network performance, across different HCI clusters through the unified management console.
	Support future integration and development work (eg. DevSecOps), it must support an API for all functions available in the Management UI, so that automation can be used to operate the platform.
	Include a network visualization page that shows a diagram of which hosts specific VMs are running on and which network ports the hosts are connected to. This should help in tracing resources during audit and troubleshooting activities.
On-Premises Cloud Platform Security	Ensure continuous security compliance. It should be able to provide full details of the security baseline to address various vulnerability assessments and lock downs done on the components within the platform.
	Must have Role-Based Access Control (RBAC) where users are assigned to specific roles in the organization and each role will have a set of defined permissions.
	Must be validated to FIPS-140-2 compliance.
	Must have Common Criteria security certification.
On-Premises Cloud Platform Data Protection and Disaster Recovery	Provide the basic ability to support 'snapshotting' of VM-based applications reflected as 'Recovery Points'.
	Support 'DR Failover' by way of using Recovery Points to secondary site(s) based on the concept of "Availability Zones" (AZs) such that VMs/Workloads at a holistic application level in AZs that can failover to each other.
	Support native replication capabilities for Synchronous (RPO=0sec), Near-Sync (1 min < RPO < 15 min) and Async (RPO > 1 hr) replication frequencies.
	Support configuration of DR Orchestration via the centralized management console.

6. Item/Description: Top of the Rack Switch, complies with the following minimum requirements:

General Requirements	
Quantity	4
	Minimum of forty-eight (48) 25 Gbps SFP+ ports with at least four (4) QSFP28 100 Gbps ports.
	Minimum of 1.08 Tbsp. (2.16 Tbps full duplex) switching capacity.
	At least throughput of 1.5 Bpps (3.0 Bpps full duplex) – Bpps (Billion packets per second)
	A flash memory capable of storing running and startup configurations.
	Shall have Out-of-band management (RJ45 console/management port with RS232 signaling).
	Support QoS configuration.
	Support IPv6.
	Supports Open-source Open Network Install Environment (ONIE) for zero touch installation as well as of alternative network operating systems.
	Shall have power-efficient operation and have a fresh air 2.0 compliant of up to 45°C.
	VXLAN gateway functionality supports bridging and routing the non-virtualized and the virtualized overlay networks with line rate performance
	L2 multipath support via Virtual Link Trunking (VLT) and Routed VLT support
	Routable RoCE to enable convergence of compute and storage on Leaf/Spine Fabric

7. Item/Description: Bare metal Server for Disaster Recovery, complies with the following minimum requirements:

Quantity	1
Form Factor	Rackmount (1U)
Processor & Chipset	Server-grade processor with at least 16 physical cores / 32 threads, 2.3 GHz.
Memory	2x 64GB RDIMM, 6400MT/s, Dual Rank (128 GB total)
Storage Capacity	4x 3.84TB SATA SSD Read Intensive, RAID 5 (15.36 TB total)
Drive Bays	Up to 10 x 2.5-inch SAS/SATA (HDD/SSD) hot-plug drive bays (4 Universal bays)
I/O Ports	Dedicated iDRAC Management Ethernet Port
Network Interface	1x Dual-Port 10GbE BASE-T OCP3 Network Adapter

	1x Dual-Port 25GbE SFP28 Network Adapter
Power	100-240 VAC, Dual, Redundant (1+1), Hot-Plug Power Supply, 800W
System Management	The management software shall have the following features:
	• Discovery and Inventory.
	• Server initiated discovery
	• Firmware update including baseline management with Update Manager Plugin.
	• In-band driver compliance and update.
	• Monitoring and Alerting
	• REST API.
	•Automated, proactive issue detection and case creation
	• Predictive failure prevention
Mounting Kit	Manufacturer's Standard
Security	TPM 2.0
	Cryptographically Signed Firmware
	Secure Boot
	Silicon Root of Trust
	System Lockdown
	Secured Component Verification
	Secure Enterprise Key Manager License 3.0

VII. BIDDER'S QUALIFICATIONS

1. The bidder must be an authorized reseller of the server and software equipment to be supported by a certificate issued by the manufacturer/distributor.
2. The bidder must have completed a Single Largest Completed Contract (SLCC) similar to the contract to be bid for the last five (5) years whose value must be at least equivalent to fifty percent (50%) of the ABC. "Similar contract" means any Supply, Delivery, Installation, Configuration and Commissioning of Network or Servers.

   A certificate of completion of the project must be provided in the technical proposal.

3. The bidder must have been in business operations for at least ten (10) years. Copy of business permits covering the last ten (10) years must be included in the Technical Proposal.
4. The bidder must have at least five (5) licensed Electronics Engineers (ECE), inclusive of a Professional Electronics Engineer (PECE), and Project Manager (PM) with all designated personnel meeting the applicable qualification and experience requirements.

Position / Designation	Qty	Minimum Years of Employment	Documentary Proof	Counted Within 5 ECE
Project Manager (PM)	1	At least 3 years	Project Management Certification	Yes
Electronics Engineer	3	At least 3 years	Valid ECE License	Yes
Professional Electronics Engineer (PECE)	1	At least 10 years	Valid PECE License	Yes

Certificate of Employment, Company ID, and License must be submitted during the opening of bids.

VIII. WARRANTIES AND GUARANTEES

The winning bidder will provide the following:

1. Three (3) year warranty on parts and services for equipment and software in the technical specifications.
2. If during the warranty period, the equipment is deemed irreparable contractor shall provide brand new unit as a replacement with no cost to PPA.
3. Ensure that all critical security advisories, firmware updates, and software patches recommended by the manufacturer are evaluated and applied during the warranty period, without additional cost to PPA.
4. Ensure that the latest software version of the proposed solution installed prior to the expiration of the three (3)-year warranty and subscription period shall remain fully functional and usable by PPA thereafter, without requiring any renewal, subscription, license fee, or additional cost.
5. Must guarantee the storage platform's minimum 5:1 data reduction ratio (see Item 3, Enterprise External Storage). Within the three (3)-year warranty period, should the guaranteed ratio not be met, PPA shall be entitled to one (1)-time delivery of additional capacity, free of charge, to meet the guaranteed ratio.
6. If the equipment is to be relocated, relocation and recommissioning must be carried out by the winning bidder without any extra cost to PPA.
7. Indemnify the project owner from and against all liabilities from damages arising from injuries or disabilities to persons, or damages to property occasioned by any or omission of the contractor, or any of his subcontractors, including any and all legal expenses or otherwise.
8. All delivered equipment must be compatible and interoperable with the PPA's existing equipment.
9. The winning bidder must address every incident encountered promptly in accordance with the Service Level Agreement as follows:
   a. Must include 24x7 on call technical support for problems related to contracted services.

b. Onsite support must be provided immediately when the issue was first reported.
c. If an incident happens during off-hours duty, remote support must be provided within one (1) hour from when the issue was first reported.
d. If the issue has not been remotely resolved, on-site support must be provided within the first two (2) hour period following discovery/report.
e. The winning bidder must provide the needed repair services and parts services within the first four (4) hours when the issue has been raised.

10. Minimum 48 hrs. advanced notification before scheduled maintenance such as firmware updates, software updates etc.
11. Spare parts or components shall be supplied as promptly as possible, but in any case, within seven (7) days from placing the order.
12. Must have one (1) full-time technical personnel assigned at the PPA Head Office in Metro Manila for support and maintenance of the entire system. Additionally, the assigned personnel will report to the office from Monday to Friday from 8AM – 5PM.
13. There must be a back-up personnel in case the full-time personnel are on leave or during weekends/holidays and off-hours.
14. Provide the necessary equipment, cables, and other components to successfully install, maintain, monitor, and manage the entire network.

V. DELIVERY

The winning bidder must deliver the Server at the PPA Head Office within two hundred and forty (240) calendar days from the receipt of Notice to Proceed (NTP). Upon completion of the license registration, installation, and configuration of the software, PPA shall issue a Certificate of Acceptance.

VI. PAYMENT SCHEDULE

1	Delivery of All Equipment indicated in the Technical Specifications	60% of the Contract Price
2	2.1. User Acceptance Testing 2.2. Technology Transfer 2.3. Submission of Required Documents	40% of the Contract Price

X. TRAINING/KNOWLEDGE TRANSFER

1. The winning bidder must provide free classroom training to fifteen (15) technical personnel on the installation, configuration, management, monitoring and maintenance of the solution. The training shall have a minimum duration of sixteen (16) hours and will be conducted after the delivery and commissioning of all equipment. A Certificate of Completion must be provided after the training has been completed.
2. Submit the following documents

- Training Syllabi and Materials
- Installation, Troubleshooting, Monitoring and Management Procedure Manual.

3. The winning bidder shall shoulder all expenses (parking, venue, meals, etc.) during the training.

XI. TESTING

1. A Hardware Acceptance Test (HAT) will be conducted on the delivered equipment. The equipment must pass a series of hardware tests such as Power-On Self-Test (POST) and Burn-In Test for a maximum period of 4 hours. Any component that is defective encountered during the period should be replaced immediately.

1. Functional testing shall be conducted immediately upon completion of any maintenance activity—whether preventive, corrective, or involving part replacement. All serviced equipment must undergo comprehensive testing to ensure proper functionality and performance in accordance with the manufacturer's specifications and operational requirements. A detailed service report documenting the results of the testing shall be submitted within twenty-four (24) hours.

    - Verification of equipment power-on and initialization.
    - Functional checks of hardware components, software, and system interfaces.
    - Validation of communication links, network connectivity, and data transfer capability (if applicable).
    - Performance measurement under normal operating conditions; and
    - Confirmation that preventive or corrective actions have resolved previously reported issues.

WILFRED THOMAS B. GORRE
Manager
Information and Communications Technology Department

H.O. - BIDS AND AWARDS COMMITTEE - PGCS
CHECKLIST OF BIDDING DOCUMENTS
SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SERVERS
ABC = Php 250,000,000.00

REQUIREMENTS	SUPPLIER
I. TECHNICAL COMPONENT ENVELOPE (1 orig. and 6 copies)	
CLASS "A" DOCUMENTS	
LEGAL DOCUMENTS	
(a) Valid PhilGEPS Certificate of Registration (Platinum Membership) in accordance with Section 20 of the IRR of R.A. 12009	
TECHNICAL DOCUMENTS	
(b) Statement of the bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the procurement project	
(c) Statement of the Bidder's Single Largest Completed Contract (SLCC) similar to the procurement project.	
(d) Bid Security in the prescribed form and amount in accordance with ITB Clause 16. If in the form of a Surety Bond, Submit also a certification issued by the Insurance Commission; or Original copy of Notarized Bid Securing Declaration	
(e) Conformity with the Technical Specifications, which may include production or delivery schedule, manpower requirements, or after-sales service or parts, if applicable	
(f) Original duly signed Omnibus Sworn Statement (OSS); and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder, in accordance with Section 54.3 of the IRR of RA 12009	
FINANCIAL DOCUMENTS	
(g)The bidder's computation of the Net Financial Contracting Capacity (NFCC). or A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.	

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REQUIREMENTS	SUPPLIER
CLASS "B" DOCUMENTS	
(h) If applicable, duly signed joint venture agreement (JVA) in case the joint venture is already in existence;	
or	
duly notarized statements from all the potential joint venture partners stating the following:	
a. that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful; and	
b. failure to enter into JVA in the event of a contract award shall be a ground for bid disqualification and subsequent forfeiture of the bid security.	
Other documentary requirements under RA No. 12009 (as applicable)	
(i) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipino]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.	
(j) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.	
II FINANCIAL COMPONENT ENVELOPE	
(a) Original of duly signed and accomplished Financial Bid Form; and	
(b) Original of duly signed and accomplished Price Schedule(s).	