



REPUBLIKA NG PILIPINAS
KAGAWARAN NG KATARUNGAN
PANGASIWAAN SA PATALAAN NG LUPAIN
(LAND REGISTRATION AUTHORITY)
East Avenue cor. NIA Road, Diliman, Quezon City

MEMORANDUM

03 December 2024

FOR : **ALL PROSPECTIVE BIDDERS**

SUBJECT : **BID BULLETIN 1**

FOR : **SUPPLY, DELIVERY, INSTALLATION, CONFIGURATION, TESTING AND COMMISSIONING OF A DATA CENTER**

This Bid Bulletin is hereby issued to all prospective bidders, for their information and guidance, on the submission of their respective proposals for the **Supply, Delivery, Installation, Configuration, Testing and Commissioning of a Data Center**.

These changes, revisions, modifications or clarifications shall become an integral part of the Contract and Bidding Documents and shall be taken into account in the submission of the prospective bidders' sealed proposals.

I. Issues and Concerns

Ms. Kristhia C. Bernales of Ardent Networks asked and clarified the following matters:

1. She requested for copies of Network Diagram and Floor Plan for the server and NOC Room.

ANSWER: A network diagram and floor plan shall be provided by the prospective bidder as part of their Project Plan and Proposal.

2. She requested for a site survey for CME assumptions.

ANSWER: A site survey may be availed upon request.

3. For the DC Power requirement, she claims that they did not see a rectified system. In this regard, she wants to confirm whether the LRA is opt to connect UPS and PDU directly to Genset system as back-up power?

ANSWER: The LRA BAC Non-Infra has an ongoing procurement related to electrical and power requirement for the Central Office building hence this item shall be discussed with the winning bidder during project implementation.

4. Do you have the list of type approved equipment and materials or is this open to all solutions?

ANSWER: The project is open to all available market solutions provided that the design and proposal is compliant with all the requirements as stated in Section VII (Technical Specifications) of the bid documents.



5. For network solution certification requirement, can we use any equivalent certifications to ACMA?

ANSWER: No. ACMA is not an industry standard network solution certification.

Mr. Eduardo G. Sumulong of Land Registration Systems, Inc. asked and clarified the following matters:

1. Schedule of Requirements – Ninety (90) calendar days upon receipt of the Notice to Proceed, would the agency consider extending the project timeline for the Data Center Bid from 90 days to at least 150 days to accommodate the complexity of deliverables such as the Hyper-Converged Data Center, Managed Cyber Security Services, Managed Kubernetes System, and the NOC/SOC Center?

ANSWER: No. The LRA requires the data center to be completed within the timeframe stated in the bidding documents.

2. With respect to the Project Components, can the agency provide a comprehensive Bill of Materials (BOM) detailing all deliverables for the project, including hardware, software, and associated services?

ANSWER: A detailed list of deliverables including description, quantities and specifications of all data center components are enumerated in Section VII (Technical Specifications).

3. Could the agency kindly provide a copy of the proposed layout for the Server Room and NOC/SOC Room?

ANSWER: These shall be provided by the prospective bidder as part of their Project Plan and Proposal.

4. Regarding the Power and Cooling Solutions Component 2-A, what is the required UPS capacity? One (1) lot means 1 unit? If only 1 unit, this will supply the left and right PDUs of the server racks?

ANSWER: The UPS requirement shall be - Two (2) Units with individual 20KVA capacity

5. In the Component 3-B – Security and Safety Systems – CCTV System, what is the total number of CCTV cameras?

ANSWER: The minimum requirement shall be three (3) CCTV cameras.

6. With regard to Component 3-C - Security and Safety Systems – Managed Cyber Security Services on Managed Cyber security services, is this supply and delivery only? Scope of Works Item 8, 9, 10, and 11 are operational.

ANSWER: The managed cyber security services is a managed services model with a three (3) year subscription.

7. In the General Specification of SOC Platform: J. The software solution must be scalable and capable to accommodate a minimum of 100GB data. Is this a daily, weekly or monthly quota?

ANSWER: Minimum quota requirement for software solution under SOC platform shall be updated to 100GB daily.

8. Regarding the Component 3-D - Security and Safety Systems - Endpoint Security, out of 2,274 licenses/endpoints, breakdown of workstations and servers?

ANSWER: This item shall be discussed with the winning bidder during project implementation.

9. For the hyper converged cluster, it says minimum of 3-nodes. Best if the number of nodes is explicitly specified. Better to specify also the server fault tolerance as this will help determine the nodes.

ANSWER: The hyper converged cluster requirement is (3) nodes.

10. Under the Managed Kubernetes System, are open source vanilla kubernetes platforms allowed? What is the required capacity of the containerization platform?

This question applies to the following:

1. master nodes
2. worker nodes
3. Load balancers

ANSWER: Yes. Open source vanilla kubernetes platforms are accepted.

Refer to the table below for the required component capacity:

<i>Component</i>	<i>Total CPU</i>	<i>Total Memory</i>	<i>Total Storage</i>
Master Nodes	12 vCPUs	48-96 GB	300 GB SSD
Worker Nodes	168-180 vCPUs	~2,700 GB	~120 TB SSD
Load Balancers	6-12 vCPUs	12-24 GB	N/A

11. The bidder must submit five (5) lists of project deployment for Structured Cabling, Network & Security and Data Center projects for both government and private companies. The bidder must attach any proof of transaction such as a copy of purchase order, notice to proceed and/or contract. Can we remove this requirement as by rules, the SLCC is enough to showcase the experience of the bidder?

ANSWER: No. The prospective bidder must establish its track record and capacity to perform contractual obligations by providing five (5) similar projects.

12. The bidder must submit a certificate of regular employment and copies of proof of employment such as but not limited to: SSS, PAG-IBIG or Income Tax Return (ITR) of the personnel. Given the extensive specialized manpower required for the project, would it be possible to remove this particular requirement to enable us to allocate additional resources and hire the necessary personnel to fully meet the project's demands?

ANSWER: No. Employment tenure and experience demonstrates skill, competency and accountability. The complexity and sensitivity of this time-bound project needs the immediate expertise of reliable and seasoned manpower requirement.

Ms. Marilyn M. Barbecho of Microgenesis asked and clarified the following matters:

1. In relation to Section VII. Technical Specification: Component 1-E- Infrastructure Development – Energy Monitoring System (7.) Must provide an API connection to LGU Cloud Server, may we request to change the item no. from a. Infrastructure Development iii. Electrical Monitoring System to a. Infrastructure Development iii. Energy Monitoring System. Additionally, we want to clarify if the word “LGU” is just a typo error.

ANSWER: Due to inadvertence, the word “LGU” shall be updated to “LRA”.

2. In Section VII, Technical Specifications: Component 2-A- Power and Cooling Solutions – Uninterruptible Power Supply (UPS) (13.) The output frequency must be 60Hz / 70Hz, may we request to change the output frequency must be 60Hz / 70Hz to output frequency must be 50Hz / 60Hz?

ANSWER: The output range frequency shall be updated to “50Hz-70Hz”.

3. Regarding Section VII, Technical Specifications, Component 4-A - IT Infrastructure and Services - Hyper Converged Infrastructure (HCI) (m.) Industry Standard Compliance: 2. ACPI 6.4 5. SMBIOS 3.4, may we request change item no. 2 technical specification in page 64, “industry standard compliance 2. ACPI 6.4 to lower it down to ACPI 6.3 and the SMBIOS 3.4 to SMBIOS 3.2.”

ANSWER: The minimum ACPI and SMBIOS compliance requirement shall be updated to “6.3” and “3.2” respectively.

4. In relation to Section VII, Technical Specifications, SYSTEM TESTING and COMMISSIONING a. Infrastructure Development (iii). Electrical Monitoring System, may we request to change the item no. from a. Infrastructure Development iii. Electrical Monitoring System to a. Infrastructure Development iii. Energy Monitoring System?

ANSWER: Due to inadvertence, the word “Electrical” shall be updated to “Energy”.

5. In Section VII, Technical Specifications, Component 5-A - Operational Management and Support – Construction of NOC/SOC Center: 140. Laptop 7. Screen: 14inch 1920x1200 WUXGA, LED UWVA 300, 60Hz, with anti-glare, 400 nits and low power usage, we would like to clarify what specific brightness is required for the laptop. Is it 300 or 400 nits as shown in TOR?

ANSWER: Minimum brightness requirement for laptop LED shall be updated to 300 nits.

6. Regarding TOR Switch, it requires that it must have at least 2x hot-swappable power supply slots, **may we request to change** the letter (m.) Hardware

Specification – TOR Switch 99. Must have at least 2x hot-swappable power supply slots to: **m. Hardware Specification – TOR Switch 99. Must have at least 2x power supply slots?**

ANSWER: Due to inadvertence, the word “hot-swappable” shall be removed from the technical specifications.

7. In relation to Manufacturer Authorization Certificate: 4.) IT Infrastructure and Services: d. Managed Kubernetes Systems and DBAAS Systems, may we request to remove from the list of Manufacturer Authorization Certificate, (d.) Managed Kubernetes Systems as this an open source platform and services?

ANSWER: Open source kubernetes platforms are accepted and shall not require MAF / Letter of Support.

8. In Section VII, Technical Specifications, it requires that: 24.) The system must be a fully consistent POSIX compliant filesystem that supports instantaneous directory renaming and directory-level snapshots, **may we request to change** the letter (m.) Specifications of Storage Solution 24. The system must be a fully consistent POSIX-compliant filesystem that supports instantaneous directory renaming and directory-level snapshots. to: **Specifications of Storage Solution (24.) The system must be a fully consistent POSIX-compliant filesystem?**

ANSWER: Minimum storage solution requirement shall be updated to POSIX - compliant filesystem.

9. Regarding Section VII, Technical Specifications, (28.) The storage solution must be FIPS 140-2 qualified from the National Institute of Standards and Technology (NIST), **may we request to change** the letter (m.) Specifications of Storage Solution 28. The storage solution must be FIPS 140-2 qualified from the National Institute of Standards and Technology (NIST). To: **Specifications of Storage Solution 28. The storage solution must be FIPS 140-2?**

ANSWER: Minimum storage solution requirement shall be updated to FIPS 140-2.

II. Other amendments and clarifications

1. Technical Specifications

ITEMS	PARTICULARS	AMENDMENTS/ CLARIFICATIONS
1(E) Component 1- E - Infrastructure Development – Energy Monitoring System	7. Must provide an API connection to LGU Cloud Server	7. Must provide an API connection to <u>LRA</u> Cloud Server

2-A- Power and Cooling Solutions – Uninterruptible Power Supply (UPS)	13. The output frequency must be 60Hz / 70Hz	13. The output frequency range is <u>50Hz - 70Hz</u>
Component 4-A - IT Infrastructure and Services - Hyper Converged Infrastructure (HCI) (m.) Industry Standard Compliance:	2. ACPI 6.4 5. SMBIOS 3.4	2. ACPI 6. <u>3</u> 5. SMBIOS 3. <u>2</u>
4-E - IT Infrastructure and Services – Network Switches and Devices – Network Switches Hardware Specification – TOR Switch	99. Must have at least 2x hot-swappable power supply slots	99. Must have at least 2x power supply slots
5-A - Operational Management and Support – Construction of NOC/SOC Center:	Screen: 14inch 1920x1200 WUXGA LED UWVA 300 , 60Hz, with anti-glare, 400 nits and low power usage	Screen: 14inch 1920x1200 WUXGA LED UWVA, 60Hz, with anti-glare, <u>300</u> nits and low power usage
7-A – Data Center Storage Solution – Data Center NAS Storage Specifications of Storage Solution	24. The system must be a fully consistent POSIX-compliant filesystem that supports instantaneous directory renaming and directory-level snapshots.	24. The system must be a fully consistent POSIX-compliant filesystem.

7-A – Data Center Storage Solution – Data Center NAS Storage Specifications of Storage Solution	The storage solution must be FIPS 140-2 qualified from the National Institute of Standards and Technology (NIST).	The storage solution must be FIPS 140-2.
14. SYSTEM TESTING and COMMISSIONING a. Infrastructure Development (iii). Electrical Monitoring System	Infrastructure Development Electrical Monitoring System	Infrastructure Development Energy Monitoring System

2. Schedule of Delivery

SECTION VI. SCHEDULE OF REQUIREMENTS	PARTICULARS	AMENDMENTS /CLARIFICATIONS
Delivered weeks/months	Ninety (90) calendar days upon receipt of the Notice To Proceed	No amendment.

Please be reminded that all queries after the release of this Bid Bulletin will not be entertained. All provisions, conditions and statements in the bidding documents inconsistent with this Bid Bulletin are either modified or rendered ineffective, as the case may be.

End of Bid Bulletin No. 1: **Supply, Delivery, Installation, Configuration, Testing and Commissioning of a Data Center**

Issued on 03 December 2024

SPECIAL BIDS AND AWARDS COMMITTEE

For: 
SALVALENTE THADDEUS B. ELIZALDE
 Chairperson