



29 November 2023

ASTI - BIDS AND AWARDS COMMITTEE

SUPPLEMENTAL BULLETIN NO. BAC-2023-11-021

LEASE OF ROOM SPACE IN DATA CENTER FACILITY WITH SERVICES INCLUDING RACK CABINET RENTAL FOR DOST-ASTI'S SECONDARY DATA CENTER (EARLY PROCUREMENT ACTIVITY)

The ASTI Bids and Awards Committee (BAC) issues this Supplemental/Bid Bulletin to clarify, modify or amend items in the Bidding Documents and to reply to queries raised by the potential bidders through letters/emails for the information of all bidders for the procurement of:

Item: **Lease of Room Space in Data Center Facility with Services including Rack Cabinet Rental for DOST-ASTI's Secondary Data Center (Early Procurement Activity)**

Approved Budget for the Contract: **Eight Million Six Hundred Forty-Nine Thousand One Hundred Fifty-Three Pesos and 96/100 Only (₱8,649,153.96)**

Invitation to Bid No.: **23-11-4632 dated 16 November 2023**

Purchase Request No.: **INNOVATE-23-10-17990 dated 09 November 2023**

Published Date (PhilGEPS): **18 November 2023 | 10334362**

A. AMENDMENT TO PROCUREMENT DETAILS AND FORMS

REFERENCE	AMENDMENT/CHANGE/CLARIFICATION	
Bid Data Sheet, Page 18	FROM:	
	ITB Clause	
	21.2	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity: <ul style="list-style-type: none"> a) Proof of Authority of the Bidder's authorized representative/s, i.e., Secretary's Certificate or Special Power of Attorney; b) Proof of Warranty; and c) Service Level Agreement (pro-forma provided for under Section VIII. Checklist of Technical and Financial Documents). d) Proof that the Data Center is certified with ISO 9001:2008 Quality Management Systems, ISO 27001:2005 Information Security Management Systems, and PEZA Accreditation
TO:		
ITB Clause		
21.2	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity: <ul style="list-style-type: none"> a) Proof of Authority of the Bidder's authorized representative/s, i.e., Secretary's Certificate or Special Power of Attorney; b) Proof of Warranty; 	

	<p>c) Service Level Agreement (pro-forma provided for under Section VIII. Checklist of Technical and Financial Documents); and</p> <p>d) Proof that the Data Center is certified with ISO 9001:2008 Quality Management Systems, ISO 27001:2005 Information Security Management Systems, and if the location of the proposed data center will be within a PEZA zone, then the bidder is required to submit PEZA Accreditation.</p>
--	--

<p>Section VII. Technical Specifications, Page 26-30</p>	FROM:	
	ITEM NO.	SPECIFICATIONS
	1	Lease of Room Space in Data Center Facility with Services (including Rack Cabinet Rental) Secondary Data Center
		1. GENERAL OVERVIEW
		1.1. The DOST-ASTI is seeking qualified and competent bidders for the Lease of Room Space in Data Center Facility with Services including Rack Cabinet Rental to serve as Secondary Data Center within the specified duration.
		1.2. The Approved Budget for the Contract is inclusive of all applicable government taxes and service charges, e.g., Value Added Tax, One-time Charges, termination and pre-termination charges, cross connection fees, duties, etc.
		2. TECHNICAL SPECIFICATIONS
		2.1. Room Space and Network Requirements
		2.1.1. Must be located inside a highly secured area of the data center but separated from the common co-location area. Ten (10) racks are needed.
		2.1.2. Ten (10) or more racks adjacent to the racks stated in
		2.1.2.1. Must be readily available in case of possible expansion in the future.
		2.1.3. Must have separate pathways for power and network cabling of at least two (2) meters separation.
		2.1.4. Must have redundant Precision Air Condition Units.
		2.1.5. Must have a redundant generator system.
		2.1.6. Must have a redundant UPS (AC).
		2.1.7. Must have redundant rectifiers (DC).
		2.2. Power Consumption Charging
		2.2.1. Must be usage-based and must provide monthly billing based on consumption.
		2.2.2. Must have a separate power meter.
		2.2.3. Provide separate costing for power consumption.
		2.3. Data Center Services
		2.3.1. Location
	2.3.1.1. Data Center must be located within five (5) kilometers from iGOV fiber splicing point.	
	2.3.2. Building Structure	
	2.3.2.1. Data Center building structure that is Seismic Zone 4 compliant	

	(corresponding to highest earthquake-risk zone).	
	2.3.2.2. Must be free from flooding and water leaks.	
	2.3.2.3. Industry standard dedicated telecommunications and electrical grounding and anti-static flooring systems to protect equipment from electro-static discharge.	
	2.3.2.4. All equipment cabinets and racks housing computing equipment should be seismically braced and bolted to the ground providing stability and to guard against equipment damage.	
	2.3.3. Security, Access, and Site Availability	
	2.3.3.1. Must have two points of entry: front and back.	
	2.3.3.2. Physical access control mechanisms:	
	2.3.3.2.1. Special issue Proximity Card Readers; and	
	2.3.3.2.2. Biometric authentication and PIN entry for highly secured areas.	
	2.3.3.3. Man-trap doors equipped with Closed Circuit Television (CCTV) cameras and/or infrared sensors for highly secured areas.	
	2.3.3.4. Round-the-clock security force (stationed and roving) in the entire facility.	
	2.3.3.5. Video surveillance using high-definition CCTV security cameras monitoring and recording movements in all areas of the Data Center such as aisles, hallways and room spaces.	
	2.3.3.6. 24/7 controlled and supervised access for the installation, testing and maintenance of co-located equipment.	
	2.3.4. Continuous Power Supply	
	2.3.4.1. Redundant and high availability of commercial power from two (2) separate paths.	
	2.3.4.2. Uninterruptible Power Supply (UPS) systems in parallel-redundant configuration efficiently distribute clean power throughout the computer/server rooms.	
	2.3.4.3. Capable of thirty (30) minutes back-up time considering 80% load or better.	
	2.3.4.4. Equipped with harmonic filters to eliminate power abnormalities (current spikes)	
	2.3.4.5. Failure of one (1) or two (2) UPS shall be backed up by the other unit without interrupting the critical load operation.	
	2.3.4.6. Fully redundant prime-duty Power Generators (N+1 configuration or better).	
	2.3.4.7. Maximum five (5) minutes	

	activation lead time after commercial power failure.	
	2.3.4.8. Can ensure up to five (5) days continuous operation without commercial power.	
	2.3.5. Facilities Management	
	2.3.5.1. All building facilities should be centrally and automatically monitored via an Intelligent Facility Management System (FMS).	
	2.3.5.2. Automatic system alerts to Facilities personnel in the event of building equipment failure and 24/7 roving facilities inspection.	
	2.3.5.3. Redundant (N+1 configuration) or better commercial grade cooling systems.	
	2.3.5.4. Fire-suppression system that is environment and equipment friendly.	
	2.3.5.5. Equipped with automated fire detection and alarm system, discharge nozzles, manually discharge device, smoke detectors, horns, bells, and strobe lights throughout the facility; fire escape plan/route with exit signs provided.	
	2.3.5.6. The proposed data center must be certified with ISO 9001:2008 Quality Management Systems, ISO 27001:2005 Information Security Management Systems, and PEZA Accreditation.	
	2.3.6. Network Infrastructure	
	2.3.6.1. Must have fiber optic nodes from at least four (4) Internet Service Providers (ISPs).	
	2.3.6.2. Must provide 1 Gbps local transport from the Data Center to ASTI at CP Garcia Ave., UP Diliman, Quezon City, readily upgradable up to 100 Gbps, within two (2) month-notice.	
	2.3.6.3. DOST-ASTI shall be allowed to bring in its own fiber up to the DOST-ASTI designated rack inside the leased space in the data center at no additional cost from the nearest iGOV fiber splicing point. DOST-ASTI shall also be provided with an 8 RU space at the designated meet-me room in the data center.	
	2.3.6.4. DOST-ASTI shall be allowed to interconnect with other ISPs, inside the meet-me room, without any additional monthly cost.	
	2.3.6.5. Any future cross-connect requirements shall be allowed and charged based only on material and installation cost i.e., free from any monthly charge.	
	2.4. Duration of the Contract	
	2.4.1. Contract shall be for twelve (12) months from the date of acceptance.	
	2.4.2. Contract is subject to renewal based on funds availability, as well as the Guidelines of Contract of Lease of Real Property and	

	Guidelines on the Renewal of Regular and Recurring Services.	
	2.5. Site Inspection	
	2.5.1. As part of the evaluation process, a team from DOST-ASTI shall conduct a site visit to the data center.	
	2.6. Implementation or Work Schedule	
	2.6.1. To be submitted by the winning bidder and to be approved by DOST-ASTI. The winning bidder must provide a layout prior to implementation, subject to ASTI's approval.	
	2.7. The Winning Bidder must not be the existing provider for the Main Data Center for redundancy purposes.	
	3. RACK CABINET AND POWER DISTRIBUTION UNITS	
	3.1. The winning bidder shall also provide the rack cabinets that will contain the server and network hardware equipment.	
	3.2. The following specifications shall include minimum requirements, unless otherwise stated, to include all genuine parts, accessories, equipment and features considered standard whether mentioned herein or not:	
	3.2.1. Dimensions: 600 mm (Width) x 1991 mm (Height) x 1070 mm (Depth)	
	3.2.2. Doors and Panels: Single front door, 75% perforated and with lock; Split rear door, 75% perforated and with lock; Split side panels with lock.	
	3.3. The frame of the rack cabinets must be manufactured from welded steel.	
	3.4. The rack cabinets must have cable-entry provisions in the roof capable of accommodating 2500+ CAT5 cables.	
	3.5. The rack cabinets must have a central grounding point included.	
	3.6. The racks must be certified to be Restriction of Hazardous Substances (RoHS) and REACH compliant.	
	3.7. Each rack cabinet must be equipped with two (2) power distribution units with the following minimum specifications:	
	3.7.1. Twenty-four (24) IEC320 C13 outlets;	
	3.7.2. Input power rating: 250 VAC, 32 Amps; and	
	3.7.3. Resettable fuse: Two (2) 16 Amps LED display for showing Amperes and Volts measurement.	
TO:		
ITEM NO.	SPECIFICATIONS	STATEMENT OF COMPLIANCE
1	Lease of Room Space in Data Center Facility with Services (including Rack Cabinet Rental) Secondary Data Center	
	1. GENERAL OVERVIEW	
	1.1. The DOST-ASTI is seeking qualified and competent bidders for the Lease of Room Space in Data Center Facility with Services including Rack	

	Cabinet Rental to serve as Secondary Data Center within the specified duration.	
	1.2. The Approved Budget for the Contract is inclusive of all applicable government taxes and service charges, e.g., Value Added Tax, One-time Charges, termination and pre-termination charges, cross connection fees, duties, etc.	
	2. TECHNICAL SPECIFICATIONS	
	2.1. Room Space and Network Requirements	
	2.1.1. Must be located inside a highly secured area of the data center but separated from the common co-location area. Ten (10) racks are needed.	
	2.1.2. Ten (10) or more racks adjacent to the racks stated in 2.1.1. must be readily available in case of possible expansion in the future.	
	2.1.2.1. Must be readily available in case of possible expansion in the future.	
	2.1.3. Must have separate pathways for power and network cabling of at least two (2) meters separation.	
	2.1.4. Must have redundant Precision Air Condition Units.	
	2.1.5. Must have a redundant generator system.	
	2.1.6. Must have a redundant UPS (AC).	
	2.1.7. Must have redundant rectifiers (DC).	
	2.2. Power Consumption Charging	
	2.2.1. Must be usage-based and must provide monthly billing based on consumption.	
	2.2.2. Must have a separate power meter.	
	2.2.3. Provide separate costing for power consumption.	
	2.3. Data Center Services	
	2.3.1. Location	
	2.3.1.1. Data Center must be located within five (5) kilometers from iGOV fiber splicing point.	
	2.3.2. Building Structure	
	2.3.2.1. Data Center building structure that is Seismic Zone 4 compliant (corresponding to highest earthquake-risk zone).	
	2.3.2.2. Must be free from flooding and water leaks.	
	2.3.2.3. Industry standard dedicated telecommunications and electrical grounding and anti-static flooring systems to protect equipment from electro-static discharge.	
	2.3.2.4. All equipment cabinets and racks housing computing equipment should be seismically braced and bolted to the ground providing stability and to guard against equipment damage.	
	2.3.3. Security, Access, and Site Availability	
	2.3.3.1. Must have two points of entry: front and back.	
	2.3.3.2. Physical access control mechanisms:	
	2.3.3.2.1. Special issue Proximity Card Readers; and	
	2.3.3.2.2. Biometric authentication and PIN entry for highly secured areas.	

	2.3.3.3. Man-trap doors equipped with Closed Circuit Television (CCTV) cameras and/or infrared sensors for highly secured areas.	
	2.3.3.4. Round-the-clock security force (stationed and roving) in the entire facility.	
	2.3.3.5. Video surveillance using high-definition CCTV security cameras monitoring and recording movements in all areas of the Data Center such as aisles, hallways and room spaces.	
	2.3.3.6. 24/7 controlled and supervised access for the installation, testing and maintenance of co-located equipment.	
	2.3.4. Continuous Power Supply	
	2.3.4.1. Redundant and high availability of commercial power from two (2) separate paths.	
	2.3.4.2. Uninterruptible Power Supply (UPS) systems in parallel-redundant configuration efficiently distribute clean power throughout the computer/server rooms.	
	2.3.4.3. Capable of thirty (30) at least fifteen (15) minutes back-up time considering 80% load or better.	
	2.3.4.4. Equipped with harmonic filters to eliminate power abnormalities (current spikes)	
	2.3.4.5. Failure of one (1) or two (2) UPS shall be backed up by the other unit without interrupting the critical load operation.	
	2.3.4.6. Fully redundant prime-duty Power Generators (N+1 configuration or better).	
	2.3.4.7. Maximum five (5) minutes activation lead time after commercial power failure.	
	2.3.4.8. Can ensure up to five (5) days continuous operation without commercial power.	
	2.3.5. Facilities Management	
	2.3.5.1. All building facilities should be centrally and automatically monitored via an Intelligent Facility Management System (FMS).	
	2.3.5.2. Automatic system alerts to Facilities personnel in the event of building equipment failure and 24/7 roving facilities inspection.	
	2.3.5.3. Redundant (N+1 configuration) or better commercial grade cooling systems.	
	2.3.5.4. Fire-suppression system that is environment and equipment friendly.	
	2.3.5.5. Equipped with automated fire detection and alarm system, discharge nozzles, manually discharge device, smoke detectors, horns, bells, and strobe lights throughout the facility; fire escape plan/route with exit signs provided.	
	2.3.5.6. The proposed data center must be certified with ISO 9001:2008 Quality	

	Management Systems, ISO 27001:2005 Information Security Management Systems, and if the location of the proposed data center will be within a PEZA zone, then the bidder is required to submit PEZA Accreditation.	
	2.3.6. Network Infrastructure	
	2.3.6.1. Must have fiber optic nodes from at least four (4) Internet Service Providers (ISPs).	
	2.3.6.2. Must provide 1 Gbps local transport from the Data Center to ASTI at CP Garcia Ave., UP Diliman, Quezon City, readily upgradable up to 400 10 Gbps, within two (2) month-notice.	
	2.3.6.3. DOST-ASTI shall be allowed to bring in its own fiber up to the DOST-ASTI designated rack inside the leased space in the data center at no additional cost from the nearest iGOV fiber splicing point. DOST-ASTI shall also be provided with an 8 RU space at the designated meet-me room in the data center.	
	2.3.6.4. DOST-ASTI shall be allowed to interconnect with other ISPs, inside the meet-me room, without any additional monthly cost.	
	2.3.6.5. Any future cross-connect requirements shall be allowed and charged based only on material and installation cost i.e., free from any monthly charge.	
	2.4. Duration of the Contract	
	2.4.1. Contract shall be for twelve (12) months from the date of acceptance.	
	2.4.2. Contract is subject to renewal based on funds availability, as well as the Guidelines of Contract of Lease of Real Property and Guidelines on the Renewal of Regular and Recurring Services.	
	2.5. Site Inspection	
	2.5.1. As part of the evaluation process, a team from DOST-ASTI shall conduct a site visit to the data center.	
	2.6. Implementation or Work Schedule	
	2.6.1. To be submitted by the winning bidder and to be approved by DOST-ASTI. The winning bidder must provide a layout prior to implementation, subject to ASTI's approval.	
	2.7. The Winning Bidder must not be the existing provider for the Main Data Center for redundancy purposes.	
	3. RACK CABINET AND POWER DISTRIBUTION UNITS	
	3.1. The winning bidder shall also provide the rack cabinets that will contain the server and network hardware equipment.	
	3.2. The following specifications shall include minimum requirements, unless otherwise stated, to include all genuine parts, accessories,	

	equipment and features considered standard whether mentioned herein or not:	
	3.2.1. Dimensions: 600 mm (Width) x 1991 mm (Height) x 1070 mm (Depth)	
	3.2.2. Doors and Panels: Single front door, 75% perforated and with lock; Split rear door, 75% perforated and with lock; Split side panels with lock.	
	3.3. The frame of the rack cabinets must be manufactured from welded steel.	
	3.4. The rack cabinets must have cable entry provisions in the roof capable of accommodating 2500+ CAT5 cables.	
	3.5. The rack cabinets must have a central grounding point included.	
	3.6. The racks must be certified to be Restriction of Hazardous Substances (RoHS) and REACH compliant.	
	3.7. Each rack cabinet must be equipped with two (2) power distribution units with the following minimum specifications:	
	3.7.1. Twenty-four (24) IEC320 C13 outlets;	
	3.7.2. Input power rating: 250 VAC, 32 Amps; and	
	3.7.3. Resettable fuse: Two (2) 16 Amps LED display for showing Amperes and Volts measurement.	

B. RESPONSE TO QUERIES

QUERY/ISSUE	BAC/END-USER RESPONSE/CLARIFICATION
For 2.1.1. <i>Must be located inside a highly secured area of the data center but separated from the common co-location area. Ten (10) racks are needed</i> , the prospective bidder clarified if a cage enclosure is needed for the 10 racks and if perimeter/distance from cage to racks is required as a cage can secure and separate the racks from the common area.	Cage enclosure is highly recommended to ensure the security of the racks.
For 2.1.2.1. <i>Must be readily available in case of possible expansion in the future</i> , the prospective bidder asked to provide the estimated number of racks for the expansion.	The complete line for Item 2.1.2 states that, "Ten (10) or more racks adjacent to the racks stated in 2.1.1. must be readily available in case of possible expansion in the future". Ergo, ten (10) adjacent racks or more shall be available.
For 2.1.7. <i>Must have redundant rectifiers (DC)</i> , the prospective bidder raised that ePLDT Vitro Data Centers doesn't have rectifiers for DC power. They added that Commercial Data Center Tier 3 does not use Rectifiers and all active components in the DC are being served by UPS.	The end-user agreed to remove provision 2.1.7.
For 2.2. <i>Power Consumption Charging</i> , the prospective bidder asked to clarify if the proposed solution will be space only, charging for power will be billed monthly and separate from the given ABC.	Yes, monthly power consumption charges will be separated as discussed in Item 2.2.3. and 5.2. The said charges will be on top of this Contract.
For 5.2. <i>Monthly rental, as well as electricity consumption, which is on top of the contract price, shall be billed to DOST-ASTI</i> , the prospective bidder	Same rationale; this Contract will only include the monthly rental. Power or electricity consumption shall be charged separately due to

<p>clarified if monthly rental and electric consumption are outside of the ABC. They added that normally, monthly rentals are fixed but the electric consumption can be billed separately and outside of ABC.</p>	<p>the considerations affecting the fluctuating monthly rates.</p> <p>Highlighting “on top of the contract price”.</p>
<p>For 2.3.1.1. <i>Data Center must be located within five (5) kilometers from iGOV fiber splicing point</i>, the prospective bidder asked to identify the iGov fiber splicing location. They added that their proposed Data Center should be Vitro Paranaque and they are uncertain if there is a 5KM iGOV fiber splicing point.</p>	<p>Nearest iGov presence, TESDA and DOST Central Office in case of Vitro Parañaque City.</p>
<p>For 2.3.3.1. <i>Must have two points of entry: front and back</i>, the prospective bidder asked if two front point entry for the server farm is acceptable and does the cage also require two points of entry?</p>	<p>Yes, we require one (1) entry point in front and one (1) exit point at the back.</p>
<p>For 2.3.4.3. <i>Capable of thirty (30) minutes backup time considering 80% load or better</i>, the prospective bidder clarified if 15minutes is acceptable</p>	<p>We can relax the provision for UPS back-up time to at least 15 minutes.</p>
<p>For 2.3.5.6. <i>The proposed data center must be certified with ISO 9001:2008 Quality Management Systems, ISO 27001:2005 Information Security Management Systems, and PEZA Accreditation</i>, the prospective bidder raised that the proposed site (Vitro Paranaque) is NOT Peza Accredited and is owned and operated by ePLDT. If they propose DC that is in PEZA Zone, they could give the PEZA accreditation otherwise they cannot.</p>	<p>We will relax this provision; if the location of the data center you will be proposing is within a PEZA zone, then you are required to submit their accreditation. Otherwise, do not.</p>
<p>For 2.3.6.3. <i>DOST-ASTI shall be allowed to bring in its own fiber up to the DOST-ASTI designated rack inside the leased space in the data center at no additional cost from the nearest iGOV fiber splicing point. DOST ASTI shall also be provided with an 8 RU space at the designated meet me room in the data center</i>, the prospective bidder raised that all fiber from outside VITRO data center can be connected up to the Telco Room only.</p>	<p>Cannot be changed. Provision shall remain the same that ASTI shall be allowed to bring in its own fiber up to the DOST-ASTI designated rack inside the leased space in the data center.</p>
<p>For 3.4. <i>The rack cabinets must have cable-entry provisions in the roof capable of accommodating 2500+ CAT5 cables</i>, the prospective bidder asked if 2500 CAT5E cables shall be running above the racks as their maximum is only 10 to 20 cables.</p>	<p>Remove this provision 3.4.</p>
<p>For 2.3.6.2. <i>Must provide 1 Gbps local transport from the Data Center to ASTI at CP Garcia Ave., UP Diliman, Quezon City, readily upgradable up to 100Gbps, within two (2) month-notice</i>, the prospective bidder raised the following queries:</p> <ol style="list-style-type: none"> 1.) Please confirm if the requirement is for layer 2 local transport only? 2.) Please confirm the interface handover from PLDT equipment to client equipment 3.) Can we get exact number of months for 1G and 100G? 	<p>The 1 Gbps is covered in this contract. If we decide to procure additional bandwidth, then this would be covered by a separate contract. However, the provision is stated as such so that any plans for link upgrade are considered (future-proofing).</p> <p>Edited provision:</p> <p>Must provide 1 Gbps local transport from the Data Center to ASTI at CP Garcia Ave., UP Diliman, Quezon City, readily upgradable up to 10Gbps, within two (2) month-notice.</p>

For 2.3.2.1. *Data Center building structure that is Seismic Zone 4 compliant (corresponding to highest earthquake-risk zone)*, the prospective bidder asked what will be the requirements to suffice the provision.

Any certification or evidence that the DC complies with DC standards, i.e. TIA-942 or similar certification or document.

ADDITIONAL INSTRUCTION/S: Prospective bidder/s are required to: 1) amend the form to update existing information or 2) submit a copy of supplemental bulletin with statement of compliance or signature of authorized representative. **Non-compliance with this requirement shall be ground for disqualification.**

Please be guided accordingly.

Prepared by:

KATHERINE B. RAMOS
Head, BAC Secretariat

Approved by:

BAYANI BENJAMIN R. LARA
Chairperson, BAC