



**SPECIAL BIDS AND AWARDS COMMITTEE FOR THE INTEGRATED GOVERNMENT
PHILIPPINES PROJECT (BAC4IGOV)**

Supplemental Bid Bulletin No. 8

NATIONAL GOVERNMENT DATA CENTER 1 (NGDC1) REHABILITATION PROJECT

Bid Reference No. BAC4IGOV-2017-03-002

Please be advised of the changes in the schedule of the Submission and Opening of Bids for this project:

ACTIVITY	PREVIOUS SCCHEDULE	REVISED SCHEDULE
Submission of Bids	16 May 2017 12 Noon	23 May 2017 12 Noon
Opening of Bids	16 May 2017 1:30 PM	23 May 2017 1:30 PM

After considering the queries, clarifications, recommendations and suggestions, the BAC4IGOV hereby decides to include, revise, amend, delete and/or adapt the following provisions:

Item No.	Query	BAC4IGOV Response
1	<p>In reference to the May 9 Revised Excel file and BOQ, we need to supply 15TR PACU for the Server Room. But in reference to the Revised May 9 detailed Technical Specifications page 14 of 46, bullet 3.2.2.3.2 under Mechanical works, it states that "Supply Installation, Testing of 1x10TR Precision A/C Unit at the Server Room.</p> <p>QUESTION: Is the 1x10TR PACU a typo error? or we should follow the 15TR? Please advise.</p>	<p>The requirement is 15TR. Please see below the changes in the Technical Specifications.</p>

Original Provision	Amended Provision
Section VII. Technical Specifications	
3.2.2.3.2. Supply, installation and testing of 1x10tr Precision A/C Unit at the Server Room	3.2.2.3.2. Supply, installation and testing of 1x15TR Precision A/C Unit at the Server Room



All terms, conditions and instructions to bidders specified in the Bidding Documents inconsistent with this Bid Bulletin are hereby superseded and modified accordingly.

Please use the following forms attached in this Supplemental Bid Bulletin:

- Revised Technical Specifications as of 15 May 2017

For information and guidance of all concerned.

Issued this 15th day of May 2017.

(SGD.) ALONA H. ISIDRO
Vice Chairperson, BAC4IGOV



**NATIONAL GOVERNMENT DATA CENTER 1 (NGDC 1) REHABILITATION PROJECT
BAC4IGOV-2017-03-002**

**REVISED TECHNICAL SPECIFICATIONS
AS OF 15 MAY 2017**

Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of **ITB** Clause 3.1.(a)(ii) and/or **GCC** Clause 2.1(a)(ii).

ITEM	MINIMUM SPECIFICATIONS	STATEMENT OF COMPLIANCE
1.	Background of the Item being Procured	
	<p>1.1. ABC of the Project and Fund Source DICT, through the 2016 GAA Fund, intends to apply the sum of One Hundred Thirty-Four Million Forty-Five Thousand Two Hundred Fifty-Eight & 66/100 Pesos (134,045,258.66) being the Approved Budget for the Contract (ABC) to payments under the contract for Procurement of GOOD AND SERVICES, for the Facility Rehabilitation Project of NGDC-1. Bids received in excess of the ABC shall be automatically rejected at the opening of the financial proposals.</p>	
	<p>1.2. Compliance with Industry Best Practices and Globally recognized Standards Adherence and Compliance with Industry recognized Standards and Data Center Best Practices are strict requirements for this project. As such, familiarity and comprehensive understanding of these standards are mandatory among all participating vendors and its partners. Vendors are expected to maintain such compliance during its implementation phase. Among the Industry Standards being referred to are the following:</p> <ul style="list-style-type: none"> 1.2.1. Uptime Institute – Tier Leveling Standards 1.2.2. TIA 942 Telecommunications Infrastructure Standard for Data Centers 1.2.3. ASHRAE design Recommendations for Datacom Facilities (TC9.9) 1.2.4. ISO 1 7799 security guidelines for data center 1.2.5. IEEE Std 1100-1999 Recommended Practice for Power and Grounding Sensitive Electronic Equipment 1.2.6. IEEE Std 446-1 995 IEEE Recommended Practice for Emergency and Standby Power for Industrial and Commercial Applications 1.2.7. ASHRAE Datacom Equipment Power and Cooling Trends 	
2.	<p>Purpose of Procurement Physical Implementation of the Rehabilitation Plans developed for NGDC-1 shall take place to avert any potential unplanned downtime. As such, DICT, through this bid, is soliciting competitive proposals from qualified Service Providers that will supply and install facility support equipment, carry out the required Civil/Architectural works, perform Testing & Commissioning and provide Support & Maintenance Services within the prescribed period.</p>	



3.	Scope of Works	
	<p>3.1. Technical Specifications Equipment and Devices Specifications stated herein shall be complied with at a minimum. Drawings shall be provided to those who bought the bidding documents and signed a non-disclosure agreement.</p>	
	<p>3.1.1. Data Center Monitoring and Leak Detection System</p> <ul style="list-style-type: none"> 3.1.1.1. Temperature & Humidity sensors, Door Contact Security and leak sensor probe with water detection capability. 3.1.1.2. Leak Detection capable to provide detection and alarm should the data center be contaminated with liquids. Sensing cords will be installed strategically to provide full detection capabilities and its alarm system to be integrated with the BMS 3.1.1.3. Send alerts for high temperature and humidity, open door and other sensor readings. 3.1.1.4. Can be used as stand-alone monitoring system with email alerts or as part of a complex monitoring (i.e. SNMP or Modbus/TCP). 3.1.1.5. Supports email alerts for individual sensors alarm when a value is out of specified range. 3.1.1.6. With built-in web server, can be accessed over the web. 3.1.1.7. With expandable hub that can hold to 8 additional ports, 4 dry contact inputs, 4 dry contact outputs and 2 relay outputs 	
	<p>3.1.2. UPS System</p> <ul style="list-style-type: none"> 3.1.2.1. UPS Frame rated at 200kW Capacity 3.1.2.2. Double Conversion Online UPS 3.1.2.3. Input Voltage : 400VAC,3Phase 60Hz,4w + Grnd. 3.1.2.4. Input Voltage Rate : 15% + 20% at 100% load 3.1.2.5. Input Current Distortion : < 3% at 100% load Capacity 3.1.2.6. Input Power Factor : > 0.99 3.1.2.7. Output Voltage : 400VAC, 3Phase,60Hz,4w + Grnd. 3.1.2.8. Output Voltage Regulation : < 1% steady state 3.1.2.9. Efficiency : Up to 96.2% with rated inear load 99.1% in ESS mode 3.1.2.10. Safety : IEC 62040-1 3.1.2.11. EMC : IEC 62040-2 3.1.2.12. Performance: IEC 6204-3 3.1.2.13. Back-up/Battery time of 30 minutes 3.1.2.14. AC/DC Capacitors must last 10 years from the time it will be operational, before the standard replacement 3.1.2.15. Must have a monitoring software that can monitor multiple UPS systems in one single view 	



	<p>3.1.3. Precision Air-conditioning System (Server & UPS Rooms)</p> <p>3.1.3.1. 15Tr & 5Tr Precision Air-conditioning Unit (PACU) respectively for each of the room partitions requiring PACUs</p> <p>3.1.3.2. DX Air Cooled, Down flow Type</p> <p>3.1.3.3. PACU must be equipped with EC Fans</p> <p>3.1.3.4. Standard R407C Refrigerant</p> <p>3.1.3.5. PACU must be dual circuit (dual compressor and dual outdoor condenser)</p> <p>3.1.3.6. Inverter Type or equipped with unique energy saving technology</p> <p>3.1.3.7. Control accuracy for temperature is $\pm 1^{\circ}\text{C}$ and for Relative humidity is $\pm 5\%$.</p> <p>3.1.3.8. Equipped with scroll compressor for less vibration, low noise and higher efficiency</p> <p>3.1.3.9. Equipped with washable air filter and alarm to notify for dirty filter</p> <p>3.1.3.10. Capable of Self-Diagnosis with Isolated Control Panel</p> <p>3.1.3.11. Capable of connecting to a network of cooling system for remote power on/off, monitoring duty cycle</p>	
	<p>3.1.4. Comfort Cooling System</p> <p>3.1.4.1. Ceiling Concealed Ducted 4.0TR Inverter 220V/1Ph/60hz</p>	
	<p>3.1.5. ELECTRICAL PANELBOARD</p> <p>3.1.5.1. UPS PANEL A & B, 400V, 3PH + 100%N + G, with MCCBs, meters, with copper busbars, Refer SLD for ratings, trip units & other details. Incomer : 600A, 3pole, MCCB Metering; CTs and Digital multi function meter Outgoing : 400A, 3pole, MCCB - 5Nos. 100A, TVSS</p>	
	<p>3.1.5.2. DP-UPS PANEL A & B, 400V, 3PH + 100%N + G, with MCCBs, meters, with copper busbars, Refer SLD for ratings, trip units & other details. Incomer : 1 x 400A, 3pole, MCCB 2 x 300A, 3pole, MCCB Metering; CTs and Digital multi function meter Outgoing : 200A, 3pole, MCCB - 2Nos. 300A, 3pole, MCCB - 1No. 400A, 3pole, MCCB - 1No. , LOADBANK 100A, 3pole, MCCB - 2Nos. 100A, TVSS</p>	
	<p>3.1.5.3. DP AC PANEL, 230V, 3PH + 100%N + G, with MCCBs, meters, with copper busbars, Refer SLD for ratings, trip units & other details. Incomer : 800A, 3pole, MCCB Metering; CTs and Digital multi function meter Outgoing : 200A, 3pole, MCCB - 3Nos. 60A, 3pole, MCCB - 2Nos. 100A, 3pole, MCCB - 2Nos. 100A, TVSS</p>	



	<p>3.1.5.4. PP UPS PANEL A & B, 400V, 3PH + 100%N + G, with MCCBs, meters, with copper busbars, Refer SLD for ratings, trip units & other details. Incomer : 200A, 3pole, MCCB Metering; CTs and Digital multi function meter Outgoing : 30A, 1pole, MCCB - 48Nos. 100A TVSS</p>	
	<p>3.1.5.5. MAIN DISTRIBUTION PANEL 230V, 3PH+ 100%N + G, with MCCBs, meters, with copper busbars, Refer SLD for ratings, trip units & other details. Incomer : 1600A, 3pole, MCCB Metering; CTs and Digital multi function meter Outgoing : 1000A, 3pole, MCCB - 2Nos. 100A, TVSS</p>	
	<p>3.1.5.6. 400KVA, Step-up Transformer 230/400V K-rated 3.1.5.6.1. 1600AT, ACB, 230V (replacement)</p>	



3.2. Deliverables

3.2.1. Professional Services Deliverables

3.2.1.1. **Shop Drawings Development** – develop and submit Engineering Designs/ Plans prior to construction mobilization. These plans must cover all the engineering works to be carried out by the contractor and to be approved by DICT.

3.2.1.2. **Construction Administration and Management** – The contractor must assign a competent Construction Manager (CM) that will oversee the Project Implementation from Day 1 until the issuance of Certificate of Final Acceptance. It is the responsibility of the CM, among others, to ensure all installation works are within the approved designs, implementation is within the approved implementation timeline, effective issue resolution, preside on weekly project progress meeting and multi-vendor management.

3.2.1.3. **Testing and Commissioning** – Deliver Professional Services relating to the performance and completion of Testing & Commissioning specific for Data Center facilities. Testing and Commissioning must be divided to 2 types:

3.2.1.3.1. Pre-Functional Testing – involves stand-alone testing of equipment and devices supplied and installed. Site Acceptance Testing (SAT) must be integrated. Factory Acceptance Testing (FAT) is preferred for select equipment but not mandatory. Should the contractor facilitates FAT, the contractor should bear all costs and there should be no delay on the shipping and onsite delivery of the subject equipment.

3.2.1.3.2. Functional/ Integrated Testing – Integrated testing refers to the testing of a fully functional data center facility without causing major disruption to normal operations.

Prior to the actual Testing & Commissioning activity, the contractor must submit all required test forms and orient DICT personnel on the procedures to be carried out during the testing phase. Any potential downtime must be flagged accordingly.

Actual testing forms used, test results recording with appropriate sign off from DICT Authorized Representative must form part of the Operations & Maintenance Manual.

**3.2.2. Construction Scope of Works and Deliverables**

3.2.2.1. **Civil Works** – supply of construction materials and other consumables essential to complete the civil/architectural works.

3.2.2.1.1. Civil/Structural Works for New Battery and Transformer Room

- 3.2.2.1.1.1. Construction of Footing and Tie Beams
- 3.2.2.1.1.2. Construction of Columns
- 3.2.2.1.1.3. Construction of Beams and Roof Beams
- 3.2.2.1.1.4. Construction of Slab on Grade, Suspended Slab and Roof Deck
- 3.2.2.1.1.5. Construction of ramp and railings
- 3.2.2.1.1.6. Dismantling of existing metal balcony
- 3.2.2.1.1.7. Provision for new Metal overhanging path walk connecting the UPS room and Transformer room
- 3.2.2.1.1.8. Provision for stair
- 3.2.2.1.1.9. Painting works

3.2.2.1.2. Roofing Works for Battery and Transformer Room

- 3.2.2.1.2.1. Supply and Installation of Roofing Trusses/Frames
- 3.2.2.1.2.2. Supply and Installation of Rib Type Roofing Sheets

3.2.2.1.3. Battery Room

- 3.2.2.1.3.1. Masonry Works
 - 3.2.2.1.3.1.1. Supply and Installation of Bulletproof or Load Bearing CHB Wall with Plastering.
 - 3.2.2.1.3.1.2. Supply and Installation of Lintel Beams and Stiffener Columns for door openings and CHB Wall
- 3.2.2.1.3.2. Supply and Installation of Anti Static Tiles for Floor Finish.
- 3.2.2.1.3.3. Painting works of the area.
- 3.2.2.1.3.4. Rubbed concrete for ceiling finish.
- 3.2.2.1.3.5. Supply and installation of Double Leaf Fire Rated Door with frame work and accessories
- 3.2.2.1.3.6. Supply and installation of Exhaust fan with Damper

3.2.2.1.4. Transformer Room

- 3.2.2.1.4.1. Masonry Works
 - 3.2.2.1.4.1.1. Supply and Installation of Bulletproof or Load Bearing CHB Wall with Plastering.
 - 3.2.2.1.4.1.2. Supply and Installation of Lintel Beams and Stiffener Columns for door openings and CHB Wall
- 3.2.2.1.4.2. Supply and Installation of Anti Static Tiles for Floor Finish.
- 3.2.2.1.4.3. Painting works of the area.
- 3.2.2.1.4.4. Rubbed concrete for ceiling finish.
- 3.2.2.1.4.5. Supply and installation of Double Leaf Fire Rated Door with frame work and accessories



	<p>3.2.2.1.5. Data Center</p> <p>3.2.2.1.5.1. Dismantling of existing rubber insulation under the raised flooring at Data Center</p> <p>3.2.2.1.5.2. Provision for Concrete Floor topping</p> <p>3.2.2.1.5.3. Supply and installation of 1" rubber insulation under raised flooring area</p> <p>3.2.2.1.5.4. Restoration of affected areas including, acoustic ceiling, raised flooring and painting of walls, all should be as per international data center standards.</p> <p>3.2.2.1.5.5. Provision for rubberize finish ramp at the entrance</p> <p>3.2.2.1.6. Cold Aisle Containment</p> <p>3.2.2.1.6.1. Repositioning of racks as deemed necessary in preparation for containment implementation</p> <p>3.2.2.1.6.2. Supply and installation of plexiglass containment ceiling and rear/front access doors on each of the containment</p> <p>3.2.2.1.6.3. Access doors must be fire rated at least 1 hour, sliding type</p> <p>3.2.2.1.6.4. All essential peripherals such as blanking panels, fire suppression discharge nozzles and fire detection and alarm system must be provided</p> <p>3.2.2.1.6.5. Provision of Perforated Tiles in each of the containment</p> <p>3.2.2.1.7. Holding Room, Staging Room, UPS Room</p> <p>3.2.2.1.7.1. Restoration of damaged areas including acoustic ceiling, flooring and painting of walls.</p> <p>3.2.2.1.7.2. Construction of new drywall partition between holding and staging room.</p> <p>3.2.2.1.7.3. Supply and installation of Double Leaf Fire Rated Door with frame work and accessories.</p> <p>3.2.2.1.7.4. Dismantling of existing door at staging area.</p> <p>3.2.2.1.7.5. Supply and installation of new flush door with panic push bar.</p> <p>3.2.2.1.7.6. Provision to cover the existing window glass area</p>	
	<p>3.2.2.2. Electrical Works</p> <p>3.2.2.2.1. Data Center</p> <p>3.2.2.2.1.1. Repositioning of existing racks</p> <p>3.2.2.2.1.2. Replacement of bulb to LED lamp</p> <p>3.2.2.2.1.3. Removal of transformer from Data Center</p> <p>3.2.2.2.1.4. Consolidate existing transformers to larger capacity Transformers</p> <p>3.2.2.2.1.5. Installation of grounding system</p> <p>3.2.2.2.1.6. Replacement of UPS Output Panel</p> <p>3.2.2.2.1.7. Installation of new Panelboards with metering system & TVSS</p> <p>3.2.2.2.1.8. Installation of Motion Sensor for existing Lighting system</p> <p>3.2.2.2.2. UPS & Battery Rooms</p> <p>3.2.2.2.2.1. Supply, Installation and testing of 2x200kW UPS</p> <p>3.2.2.2.2.2. Relocate existing UPS Batteries to the new Battery Room</p>	



	<p>3.2.2.3. Mechanical Works</p> <p>3.2.2.3.1. Decommissioning, removal and hauling of 1xAtlas Precision A/C Unit</p> <p>3.2.2.3.2. Supply, installation and testing of 1x15tr Precision A/C Unit at the Server room</p> <p>3.2.2.3.3. Supply, installation and testing of 1x5tr Precision A/C Unit at the UPS room</p> <p>3.2.2.3.4. Ducting works for 4.0TR and 3.0TR Ceiling Concealed Duct Inverter including G.I. Sheet, Fiber glass Insulation ,TDC Accessories, Sealants, Flexible Connector, Rivets and Air Terminals</p> <p>3.2.2.3.5. Supply and Installation of Refrigerant Pipe and Insulation</p> <p>3.2.2.3.5.1. Copper pipe HD, Type L, 1/4", 3/8", 1/2", 5/8", 7/8" and 1-1/8" diameter and their corresponding fittings and insulation</p> <p>3.2.2.3.5.2. P.E tape (vapor barrier) White 3" width</p> <p>3.2.2.3.6. Supply and Installation of Condensate drain pipe and insulation</p> <p>3.2.2.3.6.1. PVC pipe 3/4" and 1" diameter.</p> <p>3.2.2.3.6.2. PVC coupling 3/4" and 1" diameter.</p> <p>3.2.2.3.6.3. PVC elbow 3/4" and 1" diameter.</p> <p>3.2.2.3.6.4. Rubber Insulation 3/4" x 3/8" and 1" x 3/8" thick</p> <p>3.2.2.3.6.5. P.E. Tape (vapor barrier) blue 3" width.</p> <p>3.2.2.3.6.6. Provision for drain pipe</p> <p>3.2.2.3.7. Supply and Installation of Electrical Controls and Roughing-in.</p> <p>3.2.2.3.8. Supply and Installation of Hangers, Supports and Consumables</p>	
	<p>3.2.2.4. Structured Cabling</p> <p>3.2.2.4.1. Harnessing of existing network cables</p> <p>3.2.2.4.2. Tagging & Re-testing</p> <p>3.2.2.4.3. Additional 24ports x 16 Racks (new), 24ports x 29 Racks (unused)</p>	
	<p>3.2.2.5. Supply, Installation & Configuration of Monitoring Sensors</p> <p>Provision of flexible, modular and efficient infrastructure monitoring system to monitor centralized and decentralized sites. Hardware and software components must be suited for both large data centers and smaller distributed equipment rooms.</p> <p>The solution must be built on small and expandable base units. Each base unit must operate as a stand-alone unit that can be integrated into management platforms using SNMP, Modbus or XML, and capable of integrating it with other Network Monitoring Platform, Building Management System (BMS) or other monitoring applications.</p> <p>3.2.2.5.1. Supply and delivery of data center infrastructure monitoring system.</p> <p>3.2.2.5.2. Configuration and testing of system gateway and sensors.</p> <p>3.2.2.5.3. Basic Training for operation, configuration and troubleshooting.</p> <p>3.2.2.5.4. Provision of local technical support for all supplied components while within the warranty period.</p>	



	<p>3.2.2.6. Supply & Installation of Building Management System (BMS)</p> <p>The BMS (Building Management System) will be a robust control platform based on the current industry standard standalone controllers. The system will utilize BacNet over IP as its native protocol. The BMS will be based on an Ethernet network, a high speed loop topology Ethernet network for the primary interface and server to the network controller/hubs. Communication protocol to the analog digital/digital/digital controllers (ADC/DDC) will be via TCP/IP. Connections to devices will be via RS485 serial communication protocol (BACNET/Modbus). Includes the provision of dedicated PC for the BMS. The Integrated BMS should include the following components:</p> <ul style="list-style-type: none">3.2.2.6.1. Software Addressable Fire Alarm System3.2.2.6.2. Early smoke detection3.2.2.6.3. FM1230 based Fire Suppression System3.2.2.6.4. Access Control System involving -<ul style="list-style-type: none">3.2.2.6.4.1. Closed Circuit Television System (CCTV)3.2.2.6.4.2. Biometric and Proximity Card3.2.2.6.4.3. Attendance Management System3.2.2.6.4.4. Alarm System3.2.2.6.5. Water Leak Detection System	
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	<p>The overall design of the BMS should be suitable for integrating all systems at the Datacenter specially Electric, racks, Fire detection, Access control, cooling units & chiller, Water leak detection, Rodent, Electrical Panel, UPS, CCTV, and existing Diesel Generator set. It should be with fast configuration, automatic detection of all active data center physical infra components. Precise adaptation to requirements, a modular license model.</p> <p>Software should have the support of the SNMP protocol for connecting and monitoring all equipment in the physical IT infrastructure</p> <p>The integration into a management environment should support by SNMP. BMS should offer the option of using the IT management protocol to forward messages. On the active component side, SNMPv1, v2 and v3 are supported.</p> <p>BMS should use the optional module for the SNMP support of third-party equipment to communicate with SNMP-compatible devices made by any manufacturers.</p> <p>BMS should identifies hot-spots on servers or pending phase overloads early on. Immediate changes to the climate control or power supply ensure a considerably enhanced level of reliability in day-to-day operation.</p> <p><u>Security System:</u></p> <p>Provide, as a minimum, password-protected operator access for the following levels:</p> <ul style="list-style-type: none">○ Level 1: Ability to display all point data○ Level 2: As level 1 with ability to initiate data logging functions○ Level 3: As level 2 with ability to change user-adjustable set points and time schedules○ Level 4: As level 3 with ability to change control strategies, schematic/graphics functions and password assignment <p><u>Software System:</u></p> <ul style="list-style-type: none">○ Ensure that latest IT industry-standard operating systems are used.○ Ensure that copies of all BMS vendor-specific software are held by an independent third party and that this software can be released to DICT.○ Ensure that licenses to use software applications are owned by DICT.	
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**3.2.2.7. Supply, Installation and Testing of Data Center Infrastructure and Asset Management System**

This monitoring system shall provide monitoring and asset management at the data center level. All necessary software application, hardware, sensors/detectors, meters and peripherals needed for the collection of real-time environmental conditions and power data at the main data center for monitoring & analysis shall be provided by the winning bidder, including the monitoring console. This system should also include an Asset management capability where IT and Facility Assets are properly tagged, traced and recorded.

3.2.2.7.1. At a minimum, the system should be able to provide the following functionalities:

- 3.2.2.7.1.1. Centralized intelligent analytics and reporting to assist with management decision making
- 3.2.2.7.1.2. Enables data collection from multiple systems and protocols, reducing manual efforts
- 3.2.2.7.1.3. Provides data center monitoring and alarming for facilities with visualization of power, space and cooling data for insight, analysis and control
- 3.2.2.7.1.4. To integrate all the tasks involved in a given data center into one central system, so that the users may be able to access easily and perform more efficiently, saving time and maximizing productivity.
- 3.2.2.7.1.5. Quickly determine how much power is being consumed and how much is available.
- 3.2.2.7.1.6. To be able to identify environmental hot spots with thresholds and alerts
- 3.2.2.7.1.7. Intelligent data provision that determines if the data center is over-cooled and/or wasting energy



<p>Parameters: 80 – 100 Floor Mounted Assets</p> <p>3.2.2.7.2. User Experience</p> <p>3.2.2.7.2.1. User interface shall be provided via web browser without the need for any additional installation of software on the client computer.</p> <p>3.2.2.7.2.2. User interface shall be provided using textual or graphical views of data capability for the majority of the user interaction.</p> <p>3.2.2.7.2.3. Mobile user interface shall be provided using an application supported on iOS or Android system with access of full graphical view (2D and 3D) of the data center floors, racks, devices and connections.</p> <p>3.2.2.7.2.4. Mobile solution shall allow the user to conduct an audit of any rack noting any devices that do not conform to the placement as recorded in the DCIM tool allowing modification on any of the data center parameter</p> <p>3.2.2.7.3. Power Management</p> <p>3.2.2.7.3.1. The solution shall provide an ability to collect an inventory of all the AC power connections between devices or device ports.</p> <p>3.2.2.7.3.2. The solution shall provide an ability to build a power chain tree and for any newly connected device to inherit the attributes and upstream connections of that tree once a connection is made</p> <p>3.2.2.7.4. Alarm Management</p> <p>3.2.2.7.4.1. The solution shall collect alarms using SNMP/Modbus-IP/BACnet protocols through the deployment of remote data/alarm collection devices and shall not depend on a central data/alarm collection server.</p> <p>3.2.2.7.4.2. The solution shall allow thresholds to be applied to any measured datapoint and send email alarms whenever a threshold is breached</p> <p>3.2.2.7.4.3. Alarms will be escalated to designated person if there's no action taken</p> <p>3.2.2.7.4.4. The solution shall provide an ability to aggregate measured data over periods of time as specified automatically by the system or adjusted by the user</p> <p>3.2.2.7.5. Impact Analysis and Energy Efficiency</p> <p>3.2.2.7.5.1. The solution shall allow a user to select a device and see what other devices are dependent on the chosen device for power.</p> <p>3.2.2.7.5.2. The solution shall provide a dashboard which is automatically generated based on the placement of IT or Facilities devices on the floor plan</p> <p>3.2.2.7.5.3. The solution shall offer the user an ability to include or exclude devices from the data calculation, over riding the automatic selection carried out above.</p> <p>3.2.2.7.6. System and Administration</p> <p>3.2.2.7.6.1. The solution shall be capable of deploying in both a physical and virtual environment capable of audit trail to track and log the activities of the user. Support web browsers are Internet Explorer, Mozilla and Chrome</p> <p>3.2.2.7.6.2. The solution should allow for perpetual licenses without any restriction or limitations on users. Software updates, maintenance patches and upgrades should be available</p>	
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<p>3.2.2.7.7. Thermal Management</p> <p>3.2.2.7.7.1. The solution shall provide an ability to visualize a top down view of the floor with racks colorized to show the various levels of temperature threshold breach.</p> <p>3.2.2.7.7.2. The solution shall provide an ability to display temperature values and alarms via hover over on any temperature sensor that is placed on the floor plan</p> <p>3.2.2.7.8. Visualization of External Interfaces</p> <p>3.2.2.7.8.1. The solution shall be able to visualization of the floor plan from a top, down and elevation view providing capability to add standard or configurable grid patterns on top of the background graphic</p> <p>3.2.2.7.8.2. The solution shall provide an ability to show front and rear elevation views of any relevant floor mounted devices. This elevation will also include views of the zero U space on the sides of racks and the void at the top and bottom of racks.</p> <p>3.2.2.7.8.3. The solution shall provide an ability to show power and data connection between devices in a graphical format including multiple devices in the view</p> <p>3.2.2.7.9. Workflow Management</p> <p>3.2.2.7.9.1. The solution shall, by default, provide standard data center processes for: Installation, Move, Decommission and Rename</p> <p>3.2.2.7.9.2. The solution shall allow the user to trigger any of these processes and provide a set of standard input data to the process.</p> <p>3.2.2.7.9.3. The solution shall route any instance of a process through a standard set of notifications, approvals and decision points as outlined in the process.</p> <p>3.2.2.7.9.4. The solution shall provide a view of all work orders recorded by the tool, showing: Status, Owner, Planned completion date and History</p> <p>3.2.2.7.10. Inventory Management</p> <p>3.2.2.7.10.1. The solution shall support a model library of pre-built models to include a graphical representation of the device front, rear and top down where relevant.</p> <p>3.2.2.7.10.2. The model shall contain details such as: Make, Model number, Asset class type, Mounting type, Physical dimensions, RU height, Weight, Front image, Rear image, Data and power port specification, Power supply specification, Power, heat, space and weight capacity data of the device, Barcode, Serial number, Purchase date</p> <p>3.2.2.7.10.3. The solution library models (IT and non IT devices) shall have at least 18,000 vendor neutral models. Available models base on the actual DC environment can be added</p> <p>3.2.2.7.10.4. The solution shall have an Import Wizard that allow a user to import 1 or more devices (thru Bulk import tool) data from an open file format such as CSV. Data export can be done through CSV, Excel, PDF file format.</p>	
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	<p>3.2.2.7.10.5. The solution shall provide an ability to collect inventory from the web browser UI and mobile device using drag & drop from model library or bar code scanning</p> <p>3.2.2.7.10.6. The solution shall provide an ability to compile an inventory catalog of all devices in use in the DCIM model, critical Infrastructure devices, sensing devices or devices inside other devices (ex. Cards) .</p> <p>3.2.2.7.10.7. The solution shall allow devices to be placed on a floor plan, row, zone, rack or inside another device with capability to track to track the number of ports deployed</p> <p>3.2.2.7.11. Capacity Planning</p> <p>3.2.2.7.11.1. The solution shall provide an ability to manage the following capacities for physical areas (Power, Cooling, Weight & Space) allowing capability to assign thresholds</p> <p>3.2.2.7.11.2. The solution shall provide an ability to colorize the floor plan to show the usage of any of the container capacities specified.</p> <p>3.2.2.7.11.3. The solution has capability to search across multiple data centers and recommend a chosen floor or space for rack capacity to accommodate chosen device.</p>	
	<p>3.2.2.8. Fire Suppression System</p> <p>3.2.1.8.1. Compute for additional gas volume required for the new transformer/battery shed</p> <p>3.2.1.8.2. Relocate existing cylinder and other essential peripherals currently installed at the existing UPS battery room</p> <p>3.2.1.8.3. Supply and install addressable panel at the new transformer/battery room</p> <p>3.2.1.8.4. Supply and installation of VESDA at the server room, transformer/battery room and other rooms protected by FM200 suppression system</p> <p>3.2.1.8.5. Supply and Installation of Double Inter-lock Pre-Action System at the Holding Area including all piping works and peripherals to deliver a working system</p> <p>3.2.1.8.6. Perform Testing and commissioning upon installation completion</p>	
	<p>3.2.1.9. Test Scripts with Recorded Results – provide complete testing scripts, as appropriate, Test Forms for all equipment and devices subjected to functional testing. These forms must conform to the Manufacturer’s Testing Standards. Any deviations, additions and/or deductions may be allowed only upon presentation of reasons thereof and approval from DICT Authorized Representative. Test results must be recorded accurately in the test forms and these must form part of the Operations & Maintenance Manual.</p>	
	<p>3.2.1.10. As Built Plans – develop and submit As-Built Plans for all trades covered during the fit out works. The As-Built Plans must reflect the actual fit out works, M&E installations and other relevant works completed and duly signed-off by the signing authority designated by DICT. Mechanical and Electrical Load Schedules must form part of the As-Built plans. Submittal should be in the following form:</p> <p>3.2.1.10.1. 3 Sets of Print outs in A1 Sheet (properly compiled and labelled accordingly)</p> <p>3.2.1.10.2. 3 Sets of Print Outs in A3 Sheets (properly compiled and labelled accordingly)</p> <p>3.2.1.10.3. Soft Copies in pdf format, CD and USB Drive</p>	



	<p>3.2.1.11. Operations, Maintenance, Policies & Guidelines Manual – Contractor must compile and submit a complete Operations, Maintenance, Policies & Guidelines manual designed to provide the data center’s technical details, policies and internal processes. This manual is not limited to physical operations of the facility, hence the contractor must extensively extract critical information relevant to the development of this document. Below must be included at a minimum:</p> <ul style="list-style-type: none"> 3.2.1.11.1. Revision and Version 3.2.1.11.2. Approvals 3.2.1.11.3. Purpose and Scope 3.2.1.11.4. Overview of Data Center Facilities <ul style="list-style-type: none"> 3.2.1.11.4.1. Facilities description and location 3.2.1.11.4.2. Technical Details (HVAC and Electrical system including back-up power) 3.2.1.11.4.3. Designed load and load limit levels 3.2.1.11.4.4. Environmental Operating Parameters "temp and humidity" 	
	<ul style="list-style-type: none"> 3.2.1.11.5. Data Center Policies Overview 3.2.1.11.6. Data Centre Access - Guidelines and Process <ul style="list-style-type: none"> 3.2.1.11.6.1. Internal Staff 3.2.1.11.6.2. Visitors/ Vendors (with flow chart) 3.2.1.11.6.3. Equipment Delivery and Removal (with flow chart) 3.2.1.11.6.4. Room and Rack Key Control (with flow chart) 3.2.1.11.6.5. Back-up media storage (onsite and offsite) process and guidelines for release, acceptance and transport (with flow chart) 3.2.1.11.7. Data Center - Rules and Regulations (Dos and Don'ts) including housekeeping and waste disposal 3.2.1.11.8. Policies and Guidelines for Work Inside the Data Centre <ul style="list-style-type: none"> 3.2.1.11.8.1. IT/NW Equipment Set-up and Installation 3.2.1.11.8.2. Environmental Health and Safety Guidelines 3.2.1.11.8.3. Maintenance and Repair Works (with flow chart) 3.2.1.11.8.4. Start Up and Shutdown of Critical Facility Equipment (with approval flow chart) 3.2.1.11.8.5. Removal and Disposal of Old Equipment, Parts and Waste (with approval flow chart) 3.2.1.11.9. Emergency Process and Procedures <ul style="list-style-type: none"> 3.2.1.11.9.1. Team organization and Roles and Responsibilities 3.2.1.11.9.2. Process Flow chart 3.2.1.11.9.3. Activation and Escalation Path 	



	<p>3.2.1.11.10. Other Inclusions:</p> <p>3.2.1.11.11. DC rules and regulation Undertaking/Acceptance forms</p> <p>3.2.1.11.12. Access Approval forms</p> <p>3.2.1.11.13. Layout plans (Facility) with proper labelling - this should be a security controlled document</p> <p>3.2.1.11.14. Detailed M&E Equipment and Load Schedules</p> <p>3.2.1.11.15. Facility Load Expansion Plans</p> <p>3.2.1.11.16. Evacuation plan/route</p> <p>3.2.1.11.17. Work statement and method approval form</p> <p>3.2.1.11.18. Work permit approval form</p> <p>3.2.1.11.19. Hot work permit and approval form</p> <p>3.2.1.11.20. Work safety rules and regulations undertaking and acceptance form</p> <p>3.2.1.11.21. Emergency Contact List and Escalation (to be updated periodically)</p> <p>3.2.1.11.22. Contact List of Facility Support Department (to be updated periodically)</p> <p>3.2.1.11.23. Facility support organization, R&R, contact list</p>	
	<p>3.3. Provision of Comprehensive Maintenance Support Services</p> <p>3.3.1. The Contractor is required to include in its proposed services the provision of Comprehensive maintenance support services to select existing NGDC-1 equipment. Validity period must be similar to the duration of the extended warranty/support services attached to the newly supplied equipment.</p> <p>3.3.2. Equipment to be covered with Maintenance Support Services:</p> <ul style="list-style-type: none"> 3.3.2.1. 2x200kVa Emerson UPS 3.3.2.2. Battery refresh/replacements of existing UPS Batteries 3.3.2.3. 1x10Tr Liebert Precision A/C Unit 3.3.2.4. 1x750 Diesel Generator Set 3.3.2.5. Fire Suppression <p>3.3.3. The scope of services for the periodic preventive maintenance services must be attached to the proposal.</p>	
	<p>3.4. Permitting and Other Government Mandated Clearances</p> <p>The Contractor shall be responsible in facilitating and ensuring that all essential permits and/or clearances are secured to legitimize the construction works as mandated by Law. Cost of which shall be through the account of the Contractor.</p> <p>In addition, the bidder will be will be responsible in securing all required construction permits as mandated by law, including permits or clearances from the University of the Philippines being the "landlord" owning the property. Should there be required documentation and/or endorsement from DICT, the bidder should inform DICT of the required documentation through an official communication and DICT shall take action accordingly.</p>	
	<p>3.5. Duration of the Contract</p> <p>Contract shall cover provisions relevant to the physical construction of the facility, workmanship, equipment warranties, support and maintenance services. Workmanship validity shall be for 12 months (1 year) from date issuance of Certificate of Final Acceptance and 36 months (3 years) for extended warranty, support and maintenance services.</p>	



	<p>3.6. Warranty and Service Support Requirements</p> <p>DICT requires extended warranty, support and maintenance services, which shall be valid for 36 months/3 years from the issuance of Certificate of Final Acceptance. The contractor must include the following, at a minimum, among other terms and conditions of the warranty and support contract:</p> <p>3.6.2. Break Fix provision</p> <p>3.6.3. Minimum of 3-CTR (3 Hours Call-To-Response)</p> <p>3.6.4. Replacement of Defective Parts</p> <p>3.6.5. Provision of Service Units (not more than 2 days upon completion of the diagnosis) in cases where the supplied equipment is/are pulled out from the facility</p> <p>3.6.6. Periodic Preventive Maintenance Services (PMS) compliant with manufacturer’s PMS specifications.</p>	
	<p>3.7. Training / Knowledge Transfer / Capacity Building</p> <p>3.7.2. Knowledge Transfer – prior to the issuance of Certificate of Final Acceptance of the facility, the contractor must conduct a thorough facility walk through for DICT nominated personnel. The intent primarily is to orient these personnel on the completed installations, equipment type, functionality and how it supports the data center facility. The Knowledge Transfer must cover the following, but not limited to:</p> <p>3.7.2.1. M&E Equipment Technical Specifications i.e. capacity, functional features and other relevant technical data.</p> <p>3.7.2.2. Basic Equipment Operations i.e. menu navigation on equipment with digital functional displays, power on/off and other relevant information pertaining to normal operations of the equipment.</p> <p>3.7.2.3. Equipment Troubleshooting – contractor must provide sample occurrences and step by step procedures in addressing technical issues allowed by the equipment manufacturer to be carried out by the end-user without voiding active warranty.</p> <p>3.7.2.4. Preventive Maintenance Orientation – contractor must conduct a detailed walk-through of the processes and/or procedures to be performed during Preventive Maintenance Services.</p> <p>3.7.2.5. Expansion Orientation – contractor must orient DICT personnel on basic procedures essential during expansion. The intent primarily is familiarization on the “works” required during expansion, tapping procedures and other essential services required without disrupting normal operations of the facility.</p> <p>3.7.2.6. Support Service Structure – contractor must present the applicable Support Structure, Support Escalation Levels and valid contact details.</p> <p>All areas covered during the Knowledge Transfer sessions should be accurately documented and compiled in the Operations & Maintenance Manual which forms part of the contractor’s submittals.</p>	



	<p>3.7.3. At a minimum, the Knowledge Transfer session must include the following:</p> <p>3.7.3.1. Classroom session – presentation of designs, equipment specifications, equipment functionality, back-up systems, troubleshooting, operations and maintenance.</p> <p>3.7.3.2. Facility Walk-Through – physical inspection of all installed equipment and devices, operation demonstration i.e. power up/down, settings, basic configuration, etc.</p> <p>3.7.4. Other Provisions:</p> <p>3.7.4.1. The initial session must be delivered and conducted prior to issuance of Certificate of Final Acceptance. The initial session should be delivered not more than 30 days upon completion of testing and commissioning.</p> <p>3.7.4.2. The contractor must propose an effective scheduled sessions to avoid information overload and maximize the effectivity of the knowledge transfer.</p> <p>3.7.4.3. The contractor must accommodate request for additional sessions, at least once a year, while within the warranty period.</p>	
	<p>3.8. Compatibility & Interoperability with Open System Platform All supplied equipment, devices and/or systems must not be proprietary and are capable of integration with a third (3rd) party open system monitoring platform. Brand lock-in is not acceptable.</p>	
	<p>3.9. Penalty Clauses Winning contractor is mandated by DICT to deliver its proposed services within the mutually agreed Work Plan. In the event that the contractor is not able to deliver within the allowable and acceptable period, DICT shall impose a Delay Penalty of one tenth (1/10) of one (1) percent of the cost of the unperformed portion for every day of delay until actual delivery or performance. Penalty shall be imposed should the final acceptance date is not achieved as per agreed Project Work Plan. Should the delay/s is/are due to unavoidable circumstances i.e. typhoon, earthquakes or other natural disasters, delays caused by the Project Principals (DICT) and other forms of delays not within the control of the contractor, the contractor must provide a written report detailing the cause of delay, impacted deliverables with reasons thereof and a detailed catch up plan and/or updated work plan. This must then be presented to DICT's project team for discussion and acceptance.</p>	
	<p>3.10. Site Inspection Participating vendors/contractors will be given the opportunity to perform ocular site visit to familiarize themselves of the current condition of NGDC-1 and validate various installation locations within the site. DICT will only allow 1 visit for all vendors/contractors participating to this bid, and all expenses to be incurred by the vendors/contractors relevant to the site visit shall be borne by the vendors/contractors.</p>	



3.11. Implementation Schedule or Work Plan

Participating contractors will be required to submit a preliminary implementation schedule as part of its proposal. The preliminary implementation plan must already include identified dependencies and critical paths, and must be submitted using MSPProject format/ Gantt Chart.

The projected implementation duration for NGDC-1 is 5 months from the award date. However, part of the vendor evaluation criteria is the implementation schedule proposed by the contractor. The contractor that can commit shorter implementation schedule will be given a higher percentage during evaluation.

**3.12. Contractor/Vendor Competency Requirements (Additional Eligibility)**

Considering the nature of this project, contractors, vendors and/or service providers will be screened and evaluated based on their competencies and experience in the data center facility field. For contractors or service providers to qualify and participate to this bid, the following criteria must be met at a minimum:

- 3.12.2. Contractor must possess a valid Y2016 Philippine Contractors Accreditation Board (PCAB) License.
Any of the following are acceptable:
GENERAL BUILDING:
Categories: AA, A, B
SPECIALTY:
Categories: AAA, AA, A, B, C, D
- 3.12.3. Contractor must have Qualified Personnel with the following PRC Licenses / Certificates on its roster of employees:
 - 3.12.3.1. Architect
 - 3.12.3.2. Civil Engineer
 - 3.12.3.3. Electrical Engineer
 - 3.12.3.4. Mechanical Engineer
 - 3.12.3.5. Safety Officer with COSH and BOSH certifications
 - 3.12.3.6. Certified Data Center Professional
 - 3.12.3.7. Project Management Certification from PMP or PMI
 - 3.12.3.8. Electronics and Communications Engineer
 - 3.12.3.9. Professional Communications Engineer
- 3.12.4. Contractor must be at least be a Tier-1 Partner of an IT Multinational Company similarly engaged in the design, build and commissioning of data center facilities. Bidder must provide Certification (on original letter) from the IT Principal or IT Global Company stating its Data Center Services as one of its core offerings and that the bidder is its appointed Tier 1 Partner (or its equivalent).
- 3.12.5. The Contractor should have planned, designed, installed and commissioned at least five Data Centers/Disaster Recovery on a complete turnkey projects, within the last five (5) years, regardless of project size. Bidder must provide Certifications (on original letter) from previous customers stating the scope of services delivered by the bidder. Each of the projects must be accompanied by Certificate of Satisfactory Completion on original letter.
- 3.12.6. Contractor must be an OEM and/or authorized Business Partner of all infrastructure components of Data Center build – which are specified in BoQ/BoM. Business partners should provide certificate or letter of authorization from OEM on original letter.
- 3.12.7. Contractor must have experience in designing and building a highly secured data center facility, with varying topologies and/or Tier levels. Bidder must provide Proof of Design in the form of any of the following:
 - 3.12.7.1. Copy of the Proposal write up with design narrative we stated and signed/ accepted by the end-user;
 - 3.12.7.2. Copies of Shop Drawings or Conceptual Designs with appropriate title blocks showing the end-user company logo; or
 - 3.12.7.3. Certification from the End-user stating that the bidder has completed the design and implementation of its data center with corresponding tier level or topology stated.
- 3.12.8. Contractor should have built equal to 1,000 square meters of White Space/ Raised Floor area. Documents to this effect i.e. copy of PO or relevant Completion Certificate must be submitted in support thereof.



4.	Evaluation Process <p>4.1. Participating contractors will be required to submit 3-sets of Eligibility and Technical Documents and 3-sets of Financial Documents, appropriately signed, sealed and labelled.</p> <p>NGDC-1 Technical Working Group (TWG) will perform the evaluation of the submitted eligibility documents, technical documents, financial documents, and post qualification documents and will be evaluated based on the compliance and responsiveness to all the requirements and conditions as specified in the Bidding Documents.</p> <p>4.2. Participating contractors are required to follow the proposal document formatting as sequentially listed below:</p> <p>4.2.1. Design Narrative – contractor must provide a write up of their understanding of the pre-developed designs and their complementing designs (if any)</p> <p>4.2.2. Assumptions (if any)</p> <p>4.2.3. Innovative Technology or Designs to be applied to complement the solution (if any)</p> <p>4.2.4. Scope of Works</p> <p>4.2.5. Testing and Commissioning Scope of Works</p> <p>4.2.6. Project Management/Construction Administration Scope of Works</p> <p>4.2.7. Implementation Schedule/ Work Plan</p> <p>4.2.8. Project Team Organization</p> <p>4.2.9. Service Inclusions – i.e. Training services</p> <p>4.2.10. Service Exclusions</p> <p>4.2.11. Reference Table of Bid Compliance (Softcopy of the excel sheet shall be provided to the bidders who bought the bidding documents). Bidders must explicitly mention in the Reference Table of Bid Compliance the exact reference page, section and/or item no. with a copy of that page attached in the proposal. Bidders must also submit softcopy of the Table of Bid Compliance along with the reference documents through a flash drive. In case of inconsistency between the submitted hardcopy and that of the softcopy, the hardcopy shall prevail.</p> <p>4.2.12. Vendor Profile with Project References – must include the following:</p> <p>4.2.12.1. Company Name (Registered Business Name)</p> <p>4.2.12.2. History: Year the company was established and brief background</p> <p>4.2.12.3. Service Offerings: Professional Services relevant to this project</p> <p>4.2.12.4. Business geographical coverage</p> <p>4.2.12.5. Awards and Recognitions: List of major awards relevant to data centers, recognitions and respective awarding body</p> <p>4.2.12.6. Competencies: Brief description of your company's competencies in data center facilities engineering and information technology</p> <p>4.2.12.7. Key Contact Persons and Contact details</p> <p>4.2.12.8. Project References</p>	
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	<p>4.2.13. Attachments:</p> <ul style="list-style-type: none">4.2.13.1. Single Line Diagrams/Shop Drawings for all trades covered by the proposal. All must be printed in A3 Sheet with proper title blocks/labelling.4.2.13.2. Product Brochures of all proposed M&E Equipment and Devices4.2.13.3. Professional CVs of engineering resources to be assigned. DICT will not allow changes of resources before or while the project engagement is ongoing, without proper approval from DICT's authorized representative. In the event that engineering and/or project delivery resources will be changed, replacement engineers should have at least equal competencies with those to be replaced.4.2.13.4. Project Reference supporting documents4.2.13.5. Competency Requirements supporting documents4.2.13.6. Copy of Y2016 PCAB License4.2.13.7. Copies of SEC or DTI Registration, Mayor's permit and other government issued licenses to attest the legitimacy of the contractor's business4.2.13.8. Copies of Maintenance Agreements for covered equipment, devices and/or systems	
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5.	<p>Acceptance, Testing Criteria and Process</p> <p>DICT shall impose strict testing procedures to be witnessed by DICT nominated personnel during actual testing. As stated in the Testing and Commissioning Section, vendors will be required to propose a systematic testing procedures specifically designed for data center facilities. As such, the contractor must include in its proposal, detailed methodologies and procedures for all testing to be done.</p> <p>There are 2 Testing types to be required by DICT:</p> <p>5.1. Equipment Standalone Testing</p> <p>This refers to the power up and testing to be conducted to all M&E equipment and support devices to be supplied and installed. The contractor is required to present the testing procedures specified by the respective manufacturer. At a minimum:</p> <ul style="list-style-type: none">5.1.1. Collate/compile and present all testing forms provided by the respective manufacturer. The manufacturer or its authorized representative must certify the authenticity of the presented testing forms.5.1.2. Testing forms must be provided in duplicates during actual testing. DICT personnel, designated to witness the testing, will also record the testing results accordingly.5.1.3. Testing to be done must comply with the manufacturer's prescribed testing methods and its results must be within the expected outcome. Deviations from the standard testing procedures are not acceptable, unless necessary and approved by DICT.5.1.4. Should the test results are not within the expected outcome as per manufacturer's specifications, the contractor is required to perform troubleshooting exercises on the spot and testing to be done not more than 2 hours from the time of the first testing done. Should the issue persist, the vendor is given 48 hours to submit a Test Failure Report and perform corrective measures accordingly. Upon completion, retesting must be done in the presence of DICT personnel, twice with at least 36 hours interval to assure non-repetitive of the issue.5.1.5. Should retesting becomes mandatory, the contractor must include in its testing submittals, copies of failed and successful testing results. <p>5.2. Integrated Facility Testing</p> <p>As stated in the Testing and Commissioning Section of this document, the contractor is required to perform Facility Integrated Testing to demonstrate the efficiency of all installed systems, its interoperability with the rest of the system components, monitoring system, power distribution and all other functionalities of the facility based on given intent and objectives. The idea primarily is to test the entire facility as one system. The contractor must submit its detailed methodologies, testing sequences and test forms where test results will be recorded.</p>	
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6.	<p>Payment Terms / Progress Payment</p> <p>The Payment Terms for this project shall be through Completion of Agreed Delivery Milestones. The Contractor shall be required to submit its Implementation Milestone Report with clear emphasis on the completion of the particular milestone along with a signed Acceptance document from the iGov Project Manager or any designated signing authority by DICT. Payment milestones are tabulated below:</p> <table border="1" data-bbox="268 501 1251 927"> <thead> <tr> <th>Milestones</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>Upon DICT Approval of Submitted Shop Drawings namely architectural, electrical, mechanical, structured cabling & auxiliary system</td> <td>25%</td> </tr> <tr> <td>Upon complete onsite delivery of UPS, Precision Cooling, Transformers, Panel Boards, Data Cables and Racks</td> <td>30%</td> </tr> <tr> <td>Upon completion of Civil works, Electrical works, Mechanical works, structured cabling services, monitoring systems and all other fit out works as stated in the TOR</td> <td>30%</td> </tr> <tr> <td>Upon completion of Testing & Commissioning, Delivery of Knowledge Transfers and upon securing the Certificate of Final Acceptance from DICT</td> <td>15%</td> </tr> <tr> <td>TOTAL</td> <td>100%</td> </tr> </tbody> </table>	Milestones	Progress	Upon DICT Approval of Submitted Shop Drawings namely architectural, electrical, mechanical, structured cabling & auxiliary system	25%	Upon complete onsite delivery of UPS, Precision Cooling, Transformers, Panel Boards, Data Cables and Racks	30%	Upon completion of Civil works, Electrical works, Mechanical works, structured cabling services, monitoring systems and all other fit out works as stated in the TOR	30%	Upon completion of Testing & Commissioning, Delivery of Knowledge Transfers and upon securing the Certificate of Final Acceptance from DICT	15%	TOTAL	100%			
Milestones	Progress															
Upon DICT Approval of Submitted Shop Drawings namely architectural, electrical, mechanical, structured cabling & auxiliary system	25%															
Upon complete onsite delivery of UPS, Precision Cooling, Transformers, Panel Boards, Data Cables and Racks	30%															
Upon completion of Civil works, Electrical works, Mechanical works, structured cabling services, monitoring systems and all other fit out works as stated in the TOR	30%															
Upon completion of Testing & Commissioning, Delivery of Knowledge Transfers and upon securing the Certificate of Final Acceptance from DICT	15%															
TOTAL	100%															
7.	<p>Timelines for Implementation of the Project</p> <p>As stated in this document, the projected implementation duration is 5 months from date of award. Vendor proposed implementation schedule must not exceed 5 months. Such projections are based on the following Work Breakdown Structure (WBS):</p> <table border="1" data-bbox="256 1088 1246 1323"> <thead> <tr> <th>Description</th> <th>Duration</th> </tr> </thead> <tbody> <tr> <td>Shop Drawing/Plans Development</td> <td>0.5 Month</td> </tr> <tr> <td>Physical Construction and Installation Works</td> <td>3 Months</td> </tr> <tr> <td>Testing & Commissioning and Punch listing</td> <td>0.5 Month</td> </tr> <tr> <td>Submission of Post Construction Documents</td> <td>0.5 Month</td> </tr> <tr> <td>Knowledge Transfer and delivery of at least 1 training</td> <td>0.5 Month</td> </tr> <tr> <td>TOTAL</td> <td>5 Months</td> </tr> </tbody> </table>	Description	Duration	Shop Drawing/Plans Development	0.5 Month	Physical Construction and Installation Works	3 Months	Testing & Commissioning and Punch listing	0.5 Month	Submission of Post Construction Documents	0.5 Month	Knowledge Transfer and delivery of at least 1 training	0.5 Month	TOTAL	5 Months	
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8.	<p>Service Level Agreement</p> <p>Agreement between the Contractor and DICT that defines the Service Levels, terms and conditions for enforcing the Service Levels and the remedies in case the Service Levels are not fulfilled.</p> <table border="1" data-bbox="256 1487 1251 1677"> <thead> <tr> <th>Severity Level</th> <th>Maximum Response Time (from the time a Support Ticket has been logged to actual contractor response)</th> </tr> </thead> <tbody> <tr> <td>High/Critical/Down</td> <td>Three (3) Hours</td> </tr> <tr> <td>Medium/Normal</td> <td>Six (6) Hours</td> </tr> <tr> <td>Low/General Question</td> <td>Next Day</td> </tr> </tbody> </table>	Severity Level	Maximum Response Time (from the time a Support Ticket has been logged to actual contractor response)	High/Critical/Down	Three (3) Hours	Medium/Normal	Six (6) Hours	Low/General Question	Next Day							
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I hereby certify that the statement of compliance to the foregoing technical specifications are true and correct, otherwise, if found to be false either during bid evaluation or post-qualifications, the same shall give rise to automatic disqualification of our bid.

Name of Company

Signature Over Printed Name
Of Authorized Representative

Date



**BAC4IGOV
REVISED CHECKLIST OF REQUIREMENTS FOR BIDDERS
AS OF 15 MAY 2017**

Name of Company : _____
Name of Project : **NATIONAL GOVERNMENT DATA CENTER 1 (NGDC 1)
REHABILITATION PROJECT**
Bid Reference No. : **BAC4IGOV-2017-03-002**
ABC : **₱134,045,258.66**

Ref. No.	Particulars	
ENVELOPE 1: ELIGIBILITY AND TECHNICAL DOCUMENTS		
ELIGIBILITY DOCUMENTS		
CLASS "A" DOCUMENTS		
12.1	(a.1.) ELIGIBILITY DOCUMENTS	
	i. PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the IRR, except for foreign bidders participating in the procurement by a Philippine Foreign Service Office or Post, which shall submit their eligibility documents under Section 23.1 of the IRR, provided, that the winning bidder shall register with the PhilGEPS in accordance with section 37.1.4 of the IRR.	
	ii. Statement 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 contract to be bid (Annex I)	
	iii. Statement of Completed Single Largest Contract from January 2012 up to the day before the deadline for the submission bids of similar in nature equivalent to at least fifty percent (50%) of the ABC or Statement of at least two (2) contracts of similar nature, the aggregate amount of which should be equivalent to at least fifty (50%) of the ABC, the largest of these contracts must be equivalent to at least twenty five (25%) of the ABC. (Revised Annex I-A as of 25 April 2017)	
	iv. Duly signed Net Financial Contracting Capacity Computation (NFCC)* per Annex II , in accordance with ITB Clause 5.5 or a committed Line of Credit from a universal or commercial bank *NFCC = [(Current Assets 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. Notes: a. The values of the bidder's current assets and current liabilities shall be based on the data submitted to BIR through its Electronic Filing and Payment System. b. Value of all outstanding or uncompleted contracts refers those listed in Annex-I. c. The detailed computation using the required formula must be shown as provided above. d. The NFCC computation must at least be equal to the total ABC of the project.	
CLASS "B" DOCUMENTS (FOR JOINT VENTURE)		
	i. For Joint Ventures, Bidder to submit either: 1. Copy of the JOINT VENTURE AGREEMENT (JVA) in case the joint venture is already in existence, or	



	<p>2. Copy of Protocol / Undertaking of Agreement to Enter into Joint Venture signed by all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful. (Annex III)</p> <p><u>The JVA or the Protocol/Undertaking of Agreement to Enter into Joint Venture (Annex III) must include/specify the company/partner and the name of the office designated as authorized representative of the Joint Venture.</u></p> <p>For Joint Venture, the following documents must likewise be submitted:</p> <p>For Joint Venture <u>Between Two (2) Companies</u>, each partner should submit:</p> <ol style="list-style-type: none"> 1. PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the IRR, except for foreign bidders participating in the procurement by a Philippine Foreign Service Office or Post, which shall submit their eligibility documents under Section 23.1 of the IRR, provided, that the winning bidder shall register with the PhilGEPS in accordance with section 37.1.4 of the IRR. 	
	<p>For item (ii) to (iv) of the required eligibility documents, submission by any of the Joint Venture partner constitutes compliance.</p>	

TECHNICAL DOCUMENTS

<p>12.1 (b)(i)</p>	<p>Bid security shall be issued in favor of the DEPARTMENT OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (DICT) valid at least one hundred twenty (120) days after date of bid opening in any of the following forms:</p> <ol style="list-style-type: none"> a) BID SECURING DECLARATION per Annex IV; or b) Cashier's / Manager's Check equivalent to at least 2% of ABC issued by an Universal or Commercial Bank. c) Bank Draft / Guarantee or Irrevocable Letter of Credit issued by a Universal or Commercial Bank equivalent to at least 2% of the ABC: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank d) Surety Bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security equivalent to at least 5% of the ABC 								
	<p>Description</p>	<p>NATIONAL GOVERNMENT DATA CENTER 1 (NGDC 1) REHABILITATION PROJECT</p>							
	<p>Qty</p>	<p>1 lot</p>							
	<p>Total ABC (PhP) (VAT Inclusive)</p>	<p>134,045,258.66</p>							
	<p>BID SECURITY</p>	<table border="1"> <tr> <td data-bbox="488 1648 983 1727"> <p>Cashier's / Manager's Check equivalent to at least 2% of the ABC (PhP)</p> </td> <td data-bbox="983 1648 1362 1727" rowspan="2"> <p>2,680,905.17</p> </td> </tr> <tr> <td data-bbox="488 1727 983 1839"> <p>Bank Draft / Guarantee or Irrevocable Letter of Credit equivalent to at least 2 % of the ABC (PhP)</p> </td> </tr> <tr> <td data-bbox="488 1839 983 1917"> <p>Surety Bond equivalent to at least 5% of the ABC (PhP)</p> </td> <td data-bbox="983 1839 1362 1917"> <p>6,702,262.93</p> </td> </tr> <tr> <td data-bbox="488 1917 983 1957"> <p>Bid Securing Declaration</p> </td> <td data-bbox="983 1917 1362 1957"> <p>No required percentage</p> </td> </tr> </table>	<p>Cashier's / Manager's Check equivalent to at least 2% of the ABC (PhP)</p>	<p>2,680,905.17</p>	<p>Bank Draft / Guarantee or Irrevocable Letter of Credit equivalent to at least 2 % of the ABC (PhP)</p>	<p>Surety Bond equivalent to at least 5% of the ABC (PhP)</p>	<p>6,702,262.93</p>	<p>Bid Securing Declaration</p>	<p>No required percentage</p>
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12.1 (b)(ii)	Proof of Authority of the Bidder's authorized representative/s: a) FOR SOLE PROPRIETORSHIP (IF OWNER OPTS TO APPOINT A REPRESENTATIVE): Duly notarized Special Power of Attorney b) FOR CORPORATIONS, COOPERATIVE OR THE MEMBERS OF THE JOINT VENTURE: Duly notarized Secretary's Certificate evidencing the authority of the designated representative/s. c) IN THE CASE OF UNINCORPORATED JOINT VENTURE: Each member shall submit a separate Special Power of Attorney and/or Secretary's Certificate evidencing the authority of the designated representative/s.							
12.1 (b)(iii)	Omnibus Sworn Statements using the form prescribed. (Annex V)							
	a) Authority of the designated representative							
	b) Non-inclusion of blacklist or under suspension status							
	c) Authenticity of Submitted Documents							
	d) Authority to validate Submitted Documents							
	e) Disclosure of Relations							
	f) Compliance with existing labor laws and standards							
	g) Bidder's Responsibility							
	h) Did not pay any form of consideration							
	i) Company Official Contact Reference							
12.1 (b)(iv)	Compliance with the Schedule of Requirements as per Section VI							
12.1 (b)(v)	Compliance with the Revised Technical Specifications as of 15 May 2017 as per Section VII							
ENVELOPE 2: FINANCIAL DOCUMENTS								
13.1 (a)	Completed and signed Financial Bid Form. Bidder must use, accomplish and submit Financial Bid Form hereto attached Annex VI.							
	<table border="1"> <thead> <tr> <th rowspan="2">Description</th> <th rowspan="2">Qty</th> <th>ABC P (VAT Inclusive)</th> </tr> <tr> <th>Total</th> </tr> </thead> <tbody> <tr> <td>NATIONAL GOVERNMENT DATA CENTER 1 (NGDC 1) REHABILITATION PROJECT</td> <td>1 Lot</td> <td>134,045,258.66</td> </tr> </tbody> </table>	Description	Qty	ABC P (VAT Inclusive)	Total	NATIONAL GOVERNMENT DATA CENTER 1 (NGDC 1) REHABILITATION PROJECT	1 Lot	134,045,258.66
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		Total						
NATIONAL GOVERNMENT DATA CENTER 1 (NGDC 1) REHABILITATION PROJECT	1 Lot	134,045,258.66						
	The ABC is inclusive of VAT. Any proposal with a financial component exceeding the ABC shall not be accepted. Further, the sum of bid for each item indicated in the Detailed Financial Breakdown per Annex VI-A must be equal to the signed and submitted Financial Bid Form per Annex VI.							
13.1 (a)	Detailed Financial Breakdown per Annex VI-A							
	a) Summary Table							
	b) Revised General Requirement Table as of 9 May 2017							
	c) Civil / Architectural Works Table							
	d) Revised Electrical Works Table as of 25 April 2017							
	e) Structured Cabling Table							
	f) Mechanical Table							
	g) Fire Suppression Table							
	h) BMS Table							
	i) Revised Auxiliary Table as of 9 May 2017							
15.4(a)	Completed "For Goods Offered from Abroad" and/or "For Goods Offered From							



(i) & 15.4(b) (ii)	Within the Philippine” Forms per Annex VII-A and Annex VII-B, whichever is applicable.	
13.1 (b)	If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a Certification from the DTI, SEC or CDA to be enclosed pursuant to the Revised IRR of R.A. 9184.	
NOTE:	In case of inconsistency between the Checklist of Requirements for Bidders and the provisions in the Instruction to Bidders/Bid Data Sheet, the Instruction to Bidders/Bid Data Sheet shall prevail	