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REPUBLIC OF THE PHILIPPINES
**INFORMATION TECHNOLOGY
DEVELOPMENT DEPARTMENT**



TERMS OF REFERENCE

**COMPREHENSIVE EXPANSION AND UPGRADE OF THE QC-LGU DATA
CENTER FACILITY, INCLUDING THE INSTALLATION AND
COMMISSIONING OF A DEDICATED EMERGENCY BACK-UP POWER
SYSTEM FOR THE DATA CENTER**

I. PROJECT RATIONALE AND OVERVIEW

The need for a comprehensive expansion, upgrade, and enhancement of the QC-LGU Data Center has become increasingly urgent. This initiative seeks to ensure optimal working conditions and prevent equipment failures by improving the data center's performance, capacity, capability, and overall efficiency. In doing so, it will directly enhance service delivery to the citizens of Quezon City.

The successful implementation of IT-based programs under the leadership of the City Mayor has led to a significant accumulation of valuable information assets that are integral to the city's service delivery. This growth in data assets has made it essential to undertake this project, ensuring the continued protection and availability of these resources while minimizing downtime and securing business continuity.

Ultimately, this comprehensive upgrade will greatly enhance the QC-LGU Data Center's performance, security, and reliability, enabling it to provide high-quality services to the community and support the long-term growth and efficiency of the data center.

II. SCOPE OF WORK

This project aims to upgrade the QC-LGU Data Center to protect the city's multi-million peso investment in advanced data servers and network devices, ensuring they operate under optimal conditions. A key objective is to significantly reduce, if not eliminate, downtimes typically caused by natural disasters that impact critical service infrastructures.

The project includes the installation of specialized cooling systems for servers, network routers, and switches to maintain their efficiency. Additionally, to ensure business continuity and minimize server downtimes, a generator set specifically dedicated for the data center will be installed, providing enhanced stability and an uninterrupted electrical supply. *S.S.O.*





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The scope of the project encompasses the following:

- Installation of Precision Air-Conditioning Unit
- Implementation of Fire Detection and Suppression System
- Enhancement of Data Center Security System
- Provision of Additional Server Racks
- Integration of Data Center Monitoring System
- Modification of the Old Electrical Room as Data Center Expansion
 - Structured Cabling and Networking
 - Civil and Electrical Works
- Modular Battery Cabinets for UPS
- Emergency Back-up Power System

III. LIST OF DELIVERABLES & SPECIFICATIONS

Item No.	Description	Qty	Unit of Issue
1	Precision Air-Conditioning Units for Servers and Data Center Equipment - 3x Indoor Unit - Upflow, Aircooled, EC Plug Fan 230V/3ph/60Hz, Compliant Scroll Single Circuit, Infrared Humidifier, 9-inch HMI Display, 1-stage Electrical Heating, G4 Filter, Standard DX Air Cooled Coil, EEV, Standard Color Black Orange Peel Grain Coating, Main non-Locking Disconnects, Air-cooled, Unity Card Inclusion: Air-cooled Outdoor Condenser 230V/3ph/60Hz; Mechanical Suite, 1BAY 400mm Height Plenum (1130 Cabinet); Testing and Commissioning (1-time mobilization ONLY) (7x24); 1-Year Standard Warranty PM (Quarterly, 4-visits)	1	lot
2	Fire Detection and Suppression System for Servers and Data Center Equipment - 1x FM200 Cylinder - 1x Elec Control Head, Discharge Nozzle - 1x Control Panel with 2x Sealed Lead Acid battery - 4x Photoelectric Smoke Detector - Mechanical Works and Installation	1	lot
3	Security and Surveillance System of the New Data Center - 1x PoE NVR - 4x 4MP Fixed Dome Camera	1	lot





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	<ul style="list-style-type: none"> - 1x 2TB HDD IP Surveillance Grade - 1x Door Access Control with fingerprint, RFID card, or Face recognition capability - Roughing-Ins and Other Consumable Materials 		
4	Server Racks for Data Center Equipment <ul style="list-style-type: none"> - 6x 42Ux600Wx1200D) Front single & Rear split Mesh Door, with Side Panels, RAL7021; Single flat front mesh door; Double flat rear mesh doors; Rooftop with cable entry plates; 2 pairs of side panels, top and bottom; 4 x (19") EIA-310 vertical mounting rails; 4 fast deploying leveling feet and 4 casters; 2 x Vertical PDU; cable management tray ready for dual; PDU mounting; All rack panels are inherently grounded; 50 sets of captive M6 nuts and M6 screws; 1 set of Integrated baying kit; Open bottom area (optional cover) - 1x 18.5" LCD Tray, 16 Port IP-KVM, 16 IQ MPUIQ-VMCHS, USB KB-US INTL 	1	lot
5	Data Center Monitoring System <ul style="list-style-type: none"> - 1x Sensor Hub - 1x 8-ports Hub - 1x Temperature and Humidity Sensors - 1x Water Leak Detection Sensor - 1x AC Power Failure Sensor Probe - 1x Door Contact Security Sensor - 1x Smoke Sensor UL - 1x Monitoring App - Implementation and Support Service - Cybersecurity Solution Software for data center: Extended Detection and Response (XDR) <p>A cloud-based management platform and Hardware for collecting and analyzing network traffic. Include software updates and license and technical service for at least 1 year. Display the Applications connected to the Security Orchestration, Automation, and Response (SOAR)—a pre-built security report with the flexibility to customize new reports using a drag-and-drop interface. The intuitive drag-and-drop interface allows users to create custom reports</p>	1	lot





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	<p>tailored to specific needs, enhancing reporting flexibility.</p> <p>- Cybersecurity Solution Hardware for data center: Network Security Sensor</p> <p>The hardware should be able to analyze the traffic with at least 1GB throughput, with at least 8GB memory. Include hardware, software license, updates, and technical service for at least 1 year. The appliance will be responsible for capturing the network traffic of the agency and pushing it to the same vendor XDR Platform for analysis. Must be able to detect abnormal traffic at standard ports running with non-standard protocols. Must be able to correlate with the offered XDR Platform. Must support TLS certificate importation for encrypted data transmission. Must be able to create rules to identify unauthorized access.</p>		
6	<p>Structured Cabling and Networking for Servers and Data Center Equipment of the Data Center Expansion</p> <p>- 4 pairs UTP cable CAT6; CAT6 Information Outlets, Faceplate Duplex; CAT6 UTP Patch Cords; 24-port UTP CAT6 Patch Panel Loaded; 4-CORE OM4 Multimode FOC; Multimode SC-LC FOC patch cords; 24 Port Multimode SC Connectors Panel; SC Pigtail connectors; 19" Horizontal Cable Manager; Cable Ladders; Roughing-Ins and other consumable materials</p>	1	lot
7	<p>Civil and Electrical Works of the Data Center Expansion</p> <p>- Ceiling, Wall, and Flooring of the Old EE Room</p> <p>- Restoration of ceiling, wall and flooring</p> <p>- Anti-static Vinyl Floor Tiles</p> <p>- Electrical Installation</p> <p>- Electrical Plans (SLD and As-built) sealed and signed</p> <p>- Project and Safety Management</p>	1	lot
8	<p>Modular Battery Cabinet for 40kVA UPS of the Data Center</p> <p>- 2x Modular Battery Cabinet for up to 9 smart modular battery strings loaded with 9x 9Ah Smart Modular High-Capacity Battery String; 1x</p>	1	lot





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	Scheduled Assembly Service 5X8 for (1) Modular Batt Frame with up to 9 Batt Strings - 1x 1-Year (2 scheduled visits) Preventive Maintenance for 1x40kVA Galaxy VS UPS (S/N: QD2235180130). Replacement of Parts and Batteries are not included.		
9	Emergency Back-Up Power System for the Servers and Data Center - Data Center Emergency Back-up Power System (Build-out Generator Set) - Diesel Engine Generator Set turbocharged and after cooled rated at 300 KW/375 KVA Standby Duty, 1800 RPM, 60 Hertz, 3-phase, 0.8 Power Factor, 240V, complete with standard accessories, capable of running continuously for 72 hours in the case of calamities, provided that cooling, lubrication, and fuel levels are closely monitored and maintained at optimal levels during continuous operation. - Automatic Transfer Switch 1000A, 3P, 230v breaker type free standing - Provision of Generator House - Electrical Installation - Sealed and signed Electrical Plans (SLD and As-built) - One-Year Extended Service, including: <ul style="list-style-type: none"> • 2x Technical Analyses I – Visual Inspections • 1x Technical Analysis II – Diagnostic Testing • 1x Preventive Maintenance service 	1	lot

IV. QUALIFICATIONS AND REQUIREMENTS

The following are the minimum qualifications and requirements of the Bidder:

A. TRACK RECORD

1. The Bidder must be in the same industry as per their SEC or DTI filing.
2. The Bidder must have implemented an IT-related project in either the public or private sector, with a single contract at least fifty percent (50%) of the ABC, within the last (3) three years.
3. The Bidder must have successfully implemented a government data center related project and received a VERY SATISFACTORY rating within the last (3) three years.



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 Tel. No. 988.4242 loc. 8200 (dept. head) * 8201 (systems) * 8202 (database) * 8203 (technical)
 * 8279 (admin) * 8278 (special projects)



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B. ORGANIZATION

1. The Bidder must have updated Platinum status in PHILGEPS.
2. The Bidder must be a duly registered company with SEC or DTI filing.
3. The Bidder must be registered with the SEC or DTI as an IT company to supply IT-related goods and services.
4. The Bidder must provide a Distributor certification stating that the Bidder is a certified partner/ reseller of the products and services being offered.
5. The Bidder must provide a Manufacturer/Principal certification specific to the project stating that the bidder is authorized to sell and support the cybersecurity solutions being offered.
6. The Bidder must provide certifications of the Manufacturer of the proposed cybersecurity software and hardware solutions, ensuring compliance with internationally recognized standards. These certifications should include:
 - ISO 20000-1 IT Service Management System
 - ISO 9001 Quality Management Systems
 - ISO 27001 Information Security Management
 - Capability Maturity Model Integration Level 5

C. MANPOWER

1. The Bidder must have at least two (2) Technical Support personnel as a regular, full-time employee of the company.
2. The Bidder must have available technical support personnel capable of responding to a service call within the next business day during office hours, at least for the duration of the project.
3. The Bidder must provide an Organizational Chart/List of Manpower.

V. WARRANTY AND EXTENDED SUPPORT

All hardware components will have one (1) year warranty upon delivery, and services will carry one (1) year workmanship warranty upon acceptance of the accomplishment report.

- Technical Support:
 - Workdays from 8 AM to 5 PM, with a response time within the day or the next business day. *G.C.D.*





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- Weekends and holidays, expect a response by the next business day.

VI. DELIVERY, INSTALLATION AND PAYMENT SCHEDULE

Within 6 months upon issuance of the Notice to Proceed.

MILESTONES	Delivery Period	Basis for Payment
MILESTONE 1 Upon Submission of the Project Implementation Plan including the Minutes of Initial Implementation Meetings and GANTT Charts. Upon Delivery Completion or Issuance of End User's Certificate of Acceptance to the Service Provider for the following: <i>Item No. 1: Precision Air-Conditioning Unit</i> <i>Item No. 2: Fire Detection and Suppression System</i> <i>Item No. 3: Security and Surveillance System</i> <i>Item No. 4: Server Racks</i> <i>Item No. 5: Data Center Monitoring System</i> <i>Item No. 6: Structured Cabling and Networking</i> <i>Item No. 7: Civil and Electrical Works</i> The Procuring Entity will release Php 65,000,000.00 to the Service Provider	Within 120 days	Php 65,000,000.00
MILESTONE 2 Upon Delivery Completion or Issuance of End User's Certificate of Acceptance for the following: <i>Item No. 8: Modular Battery Cabinet for UPS</i> <i>Item No. 9: Emergency Back-up Power System</i> The Procuring Entity will release the remaining Php 30,000,000.00 to the Service Provider	Within 180 days	Php 30,000,000.00





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VII. APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for the Contract (ABC) amounts to Ninety-Five Million Pesos (Php 95,000,000.00) VAT Inclusive.

VIII. PENALTIES FOR BREACH OF CONTRACT

Failure to deliver the goods and services according to the standards and requirements set by the City shall constitute an offense and shall subject the winning bidder to penalties and/or liquidated damages under RA9184 and its revised Implementing Rules and Regulations.

IX. CANCELLATION OR TERMINATION OF CONTRACT

The guidelines contained in RA9184 and its revised IRR shall be followed in the termination of any service contract. In the event the City terminated the Contract due to default insolvency, or for cause, it may enter negotiated procurement according to RA9184 and its IRR.

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