

CIVIL SERVICE COMMISSION

TERMS OF REFERENCE

Procurement of Additional Blade Servers
with Storage and Micro Data Center

As of Feb. 2018

Procurement of Additional Blade Servers with Storage and Micro Data Center

1. OBJECTIVE

To procure additional servers and storage with high-end specifications for an efficient and reliable access to various ISSP identified ICT projects of the Commission.

To have a co-location of data located in one of the CSC regional offices as a risk reduction measure and backup.

To ensure at least 95% or higher availability or uptime of servers which are hosting various CSC applications.

2. TECHNICAL SPECIFICATIONS

Item	Quantity	Description
Blade Server** (Half height)	4	<p>Processor(s) Quantity: 2 Processor Base Frequency Speed: Minimum 2.0 GHz Number of Cores: Minimum of 14 Cache: Minimum of 16Mb</p> <p>Memory Minimum 128GB (4 x 32GB) Dual Rank DDR4-2400</p> <p>Network Controller One (1) Flex-10 10Gb 2P 530FLB FIO Adptr1 One (1) Flex-10 10Gb 2P 530M Adptr</p> <p>Storage Controller Smart Array P220i Controller with 512MB FBWC RAID 0,1</p> <p>Hard Drive (2) 1.2TB 6G SAS 10K rpm SFF (2.5-inch) 3yr Warranty Hard Drive</p> <p>Expansion Slots 2 standard - Slot 1 supports Type A mezzanine Cards. Slot 2 supports Type A and Type B mezzanine cards.</p> <p>Management iLO Management Engine (standard)</p> <p>Warranty 3 year Parts, 3 year Labor, 3-year on-site support. Compatible to the existing HP C7000 Blade Enclosure</p> <p>Delivery Site Must be delivered at the CSC main office</p>
Storage**	2	<p>Brand New</p> <ul style="list-style-type: none"> • Two (2) 8Gb 8Gb FC ports • Two (2) 1Gb iSCSI ports • Browser based GUI management • 24 slots SFF 2.5 Inch which support 1.2TB SAS 10K HDD • Twenty-four (24) 1.2TB 10K SAS HDD with 3 years' minimum warranty • 2 GB transportable read/write cache per controller. Battery-free cache backup with super capacitors and compact flash • Non-disruptive on-line controller code upgrade

		<ul style="list-style-type: none"> • Maximums vary by RAID levels: 2 drive max for RAID level 1; max of 16 drives for RAID levels 0, 3, 5, 6, and 10; max of 32 drives for RAID level 50 • Vdisks can be spanned across multiple enclosures • RAID levels 0, 1, 3, 5, 6, 10, 50 • Array can grow incrementally from a few drives to 178 TB SAS, 576 TB of SAS or 192 TB SATA • Can be stack to existing HP MSA 2040 <p>Delivery Site Must be delivered at the CSC main office</p>
Micro Data Center	1	<p>Structure and Cabinet Dimension: 600x1100x2000mm (minimum excluding cooling and other items) Available Space (U): Minimum 20U</p> <p>Power Supply Power: 220/230V Single Phase (Input/Output) Power Distribution Unit: 230Vac 63A with surge protection Backup Time: minimum 15 minutes</p> <p>Cooling System Cooling Capacity(KW): 3.5 Air Supply Mode: Rack Mounted</p> <p>Monitoring Local Display: minimum 10' Screen Sensors: Temperature and Humidity, Smoke, Water Camera: 1 Can monitor the power distribution, AC and Emergency Ventilation</p> <p>UPS Capacity: 3KVA/2.7KW</p> <p>Fire Suppression: Yes</p> <p>Warranty 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.</p> <p>Delivery Site Must be delivered in one of the CSC regional office (Visayas Area)</p> <p>Support Must have local support in the area of delivery.</p>
Server**	1	<p>Processor Base Frequency: Minimum of 2.4GHz Number of Cores: Minimum 10 Cache: Minimum of 16Mb</p> <p>Memory Minimum 128GB (4 x 32GB) Dual Rank DDR4-2400 Minimum 24 Memory Slots Can support up to 384GB RDIMM</p> <p>Network Controller (4) 1GB ports Ethernet LAN</p> <p>Hard Drive (10) 1.2TB SAS 12G 10K SFF (2.5in) with storage controller that supports RAID 0 up to 6+0 Can support up to 16 HDD</p> <p>Optical Drive DVD-RW</p> <p>Power Supply (2) 800W Hot Plug Power Supply</p>

		<p>Form Factor Rack (2U), Ball Bearing Rail Kit/Cable Management Arm standard</p> <p>System Fans Minimum of 6</p> <p>Form Factor 2U Rack form factor</p> <p>Interfaces USB ports: 2 Front, 4 Back Management Network Port: 1GB Video: 1 Front, 1 Back</p> <p>Delivery Site Must be delivered in one of the CSC regional office (Visayas Area)</p> <p>Support Must have local support in the area of delivery.</p>
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***Must be produced by manufacturers listed in the leader and visionaries quadrant of Gartner "Magic Quadrant for Modular Servers" as of May 2016.
URL: <https://www.gartner.com/doc/3327517/magic-quadrant-modular-servers>*

3. BIDDER QUALIFICATION

Bidders must submit a vendor certification stating that all equipment to be supplied is brand new, up-to-date product and intended for Philippine market.

4. WARRANTY AND MAINTENANCE

Three (3) years warranty on all hardware products including free parts and labor onsite. Warranty shall also cover the immediate replacement of equipment (service unit) or defective parts free of charge.

5. DELIVERY PERIOD

All equipment/workmanship shall be delivered/installed at the specified location within 60 calendar days upon receipt of Notice to Proceed.

Bidder must assign technical personnel to assist CSC in the installation and configuration of the servers and Micro Data Center.

6. TRAINING COMPONENT

Provide training on the installation, troubleshooting, configuration and management of all the equipment. The said training will have at least ten (10) pax inclusive of meals and snacks, certificates and handouts for the account of the winning bidder.

7. APPROVED BUDGET FOR THE CONTRACT (ABC)

The total ABC is **Php12,019,454.70** inclusive of all applicable government taxes and charges.



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