



Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY
Philippine Atmospheric, Geophysical and Astronomical Services
Administration (PAGASA)

07 July 2021

SUPPLEMENTAL / BID BULLETIN
ADDENDUM NO. 2021-028-01

Subject: "Supply, Delivery, Installation, Training and Commissioning of Distributed Storage for Mactan, Cebu" / ABC Php 35,000,000.00 / PR No. 2021-06-0379 / Ref. No. IB 2021-028

This Bid Bulletin is being issued to all prospective bidders to clarify, amend and/or modify certain provisions in the Bidding Documents and to answer the written clarificatory questions submitted by prospective bidders, to wit:

Query from Integrated Computer Systems, Inc.

Question(s)	PAGASA BAC Answer(s)
<p>1. Server Storage Nodes</p> <p>Can we offer different hard drive configuration per node as long as we meet the 1.5PB requirement?</p>	<p>Yes, as long as there is no compatibility issue with the existing system. Please be reminded that the current configuration is based on existing system.</p>
<p>2. Data Cabinet</p> <p>Should the bidder include the PDU in the proposal or PAGASA already have an existing PDU onsite?</p>	<p>Yes. All electrical requirements must be provided by the bidder including the necessary PDU.</p>
<p>3. Additional Requirements & Integration of Storage Facility</p> <p>What's the brand and model of the storage in the main site? We need to determine this item for us to make sure that the storage we will offer is compatible with your existing Storage in the Main Site.</p>	<p>Huawei OceanStor 9000 (Installed on 2020 at WFFC PAGASA)</p>
<p>4. Additional Requirements & Integration of Storage Facility</p> <p>How is the replication to DR going to work? Is there a 3rd party software/hardware that's in place?</p> <p>Are there RPO, RTO requirements?</p>	<p>Replication to DR is incremental and no 3rd party software is in place.</p> <p>No, there are no specific RPO/RTO requirements but it shall comply with industry standards.</p>
<p>5. Additional Requirements & Integration of Storage Facility</p>	

What is the internet connectivity on the main and DR sites?	Two (2) public/commercial ISP and one (1) private leased line.
6. Multi-WAN router What is the brand and model of your existing multi-WAN router provisioned in the primary site?	Peplink BPL-380 Router
7. Electrical System Electrical works of the UPS shall be handled by PAGASA ETSD. Please confirm.	No.


Query from **Beacon Solutions, Inc.**

Question(s)	PAGASA BAC Answer(s)
1. Please clarify terms such as WFFC, other acronyms in the bid document that may be relevant to solutioning?	WFFC stands for Weather and Flood Forecasting Center.
2. What is the make and model of primary site storage? How is it connected to servers, to the network?	The model is Huawei OceanStor 9000 connected to a 10G network.
3. What is the scope of the Disaster Recovery Site functionality? Is it limited to Primary site storage replication to DR site storage? Will off-site applications accessing the primary site, expected to be switched automatically to DR site storage in case disaster is declared at primary site? Note that if this is more than just storage functionality, Agency must divulge details about the applications and application architecture as well.	Disaster Recovery storage site is a backup repository for meteorological (unstructured) data with failover and failback capability including readiness for future sites.
4. What is the current storage space taken up by data in the primary site storage? What is the amount of active data in the primary site storage? How much data changes every day?	More or less 200TB with incremental of at least 1-2 TB per month.
5. Is the DR site storage for DR purposes only? Will it support local Departments in PAGASA Mactan Office? Please indicate the expected local storage access architecture/details if this is the case.	No. The DR site will provide local storage for the regional office via NFS, CIFS, FTP, etc.
6. Under Item E.5, p5 of 7 of the Technical Specifications, both storage sites must be licensed for desired features. Clarification: Are the primary site storage licenses already procured or is part of this bid? Pls. provide details on the licensing of the primary site storage.	Primary storage site has already the necessary licenses for standard function. Any additional licenses for the integration of DR site including advanced functionalities shall be included.

7. In p5 of 7, it was mentioned that there is an existing leased line. Is this leased line primary site to internet? Does the DR site also have a similar arrangement? Alternatively, is there some other existing connectivity arrangement between primary site and DR site that the bidder can use?	No. The DR site has 2 public internet (10mbps and 4mbps) and 1 private leased line between Primary and DR, transport only (CIR 2mbps). The project will use all available connectivity between 2 sites.
8. Item f (Multi-WAN Router), No. 3 on page 4 of 7 of the TOR, states as follows: "Must be the same brand and model with the current multi-WAN router used in the primary site WFFC storage facility to establish site-to-site VPN with remote site Cebu DR storage facility". May we know the exact brand and model of the current multi-WAN router used in primary site WFFC storage facility?	Peplink BPL-380.
9. The specification is leading towards Huawei OceanStor 9000 V5 Scale-Out NAS which is a distributed file system, and aspects like DST, and the specifications of 36 drives match the configuration. Can we offer an equivalent?	Yes, if it will conform with the specifications, will seamlessly work with the current and will provide no conflict with future implementation.
10. What is: a. Use case	a. NAS storage system with fully symmetric distributed architecture that provides a super-large single file system for shared storage of unstructured data, whether hot or cold.
b. Application type and name using the storage	b. Can be introduced as a Network File Share using the multiple supported protocols running on Windows, Linux, UNIX and MAC OS.
c. Primary protocol that will be used	c. CIFS, NFS and FTP
d. File types and size	d. Most of the file types with different sizes are supported.
e. Performance requirement	e. High-performance read/write access with up to 2.8GB/s of bandwidth per node.
11. May we ask for 3-weeks extension of the deadline for submission of bids?	No. The schedule of Submission of Bids is dependent on PhilGEPS.

This shall form an integral part of the Bid Documents.

For guidance and information of all participating bidders.


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 Chairperson, PAGASA-BAC 