Corrigendum for tender no NIT/IT-01/2024

Annexure V

General Terms and condition:

18. The bidder needs to submit PBG for 3% of the actual value of the order for 63 Months.

Eligibility Criteria and Other Terms:

Point 2. The bidder / Server OEM should have executed at least 3 HPC Cluster projects either directly or thru any system integrators (at least one cluster of the size 100TF either only CPU-CPU performance or CPU-GPU performance added together) during last 10 years in India using an architecture and technologies similar to this tender at organizations in India. Details of the same must be submitted with technical bid. Credential of an OEM will also be considered if supply done by their authorized partner.

Master cum Log in Node - 1 No			**In Tender**	
CPU-CPU Node				
S.No on Page	**Page No in RFP**	**Item**	**Technical Specification**	**Corrigendum**
7	Page No 5	Master Node Disks configured	Volume 1: 2 no's x 960GB or higher NVME (M.2) SSDs, and Volume 2: 6 no's x 3840GB or higher NVME (M.2) SSD Installed	Volume 1: 2 no's x 960GB or higher NVME SSDs, Volume 2: 6 no's x 3840GB or higher NVME SSD Installed.
		PCI Slot(for Master node and compute node)	Mini 4 or more (x16). atleast one PCI slot should be free for future expention.	At least 2 (x16). or more
General Query	General Query	Please Clarify the Support Required for Overall solution Components Hardware & Software		Please consider 5 years of comprehensive onsite, NBD support. Media retention policy applicable on complete solution.
			XIII. Unified Storage System	
S.No on Page	**Page no in RFP**	**Features**	**Descriptions**	
1	Page No 10	Data Secure Storage Architecture	Security of the system is based on the protection and secrecy of the cryptographic info, especially against reading out or manipulation of the key data. Tick counter with tamper detection, Protection from Dictionary Attack Support RSA Secure ID, Encrypted File System.	Data Secure Storage Architecture or Equivalent Features
2	Page No 10	VTL Enabled	- VTL to VTL replication - VTL Logical block protection - Physical tape import/export	Removed
5	Page No 10	Protocols Supported	The Proposed Storage must support SMB/CIFS, NFS, FTP, NFS over RDMA for file storage purpose and iSCSI, FC for block storage connectivity respectively.	The Proposed Storage must support SMB/CIFS, NFS, FTP, NFS over RDMA for file storage purpose and iSCSI, FC for block storage connectivity

				respectively. Additional Dual Controller NAS Header is allowed to quote,
6	Page No 10	Storage to Host Connectivity	Minimum 4 x 1G (RJ45) and 2 x 10/25G or higher for storage connectivity with load balancing enabled from day one. Future upgrade to Optional FC (16G) Controller and 1 x 100G (IB) support also available. User department will decide for connecting systems using respective controller.	2 x 10/25G Ports Per controller is the minimum requirement,
10	Page No 10	RAID & Memory Support	The offered Storage should support Raid 0, 1, 1+0, 5, 6,50 and Raid 60 or equivalent RAID Volumes. Per Controller Memory should be 32GB volatile Memory or higher.	RAID levels Support RAID 0, 1, 1+0, 5, 6,50 and Raid 60 or equivalent RAID Volumes. Per Controller Memory should be 32GB volatile Memory or higher. (This RAID and Memory requirement for complete Unified Storage array.)
			Should have Single Graphic Use Interface (GUI) for both File and Block as well as command line interfacing. Must include real time performance monitoring tools giving information on CPU utilization, volume throughput, I/O rate and latency etc. All monitoring tools must be from OEM only- no 3rd party monitoring s/w to be bundled with system.	Single GUI and CLI Mangement required for both File and Block Storage. With include real time performance monitoring tools . All monitoring tools must be from OEM only- no 3rd party monitoring s/w to be bundled with system.
12	Page No 10	Storage Management		

Virtual Computing through Converged Architecture Description

S.No in Page	Page No in RFP	Description	Corrigendum
24	Page No 12	SOLUTION should support scalability for more than 150 nodes in a single cluster	The solution should be scalable. Give details of scalability in your proposal
29	Page No 12	Must have Network/ Port Security	Network/ Port Security or equivalent feature required. Or OS setup to secure the ports must be configured. Give details of your solution
30	Page No 12	Must have Application Load Balancer to the tenant level.	Application Load Balancer or Equivalent Feature to the tenant level.
31	Page No 12	Must have provisioning, operations and lifecycle management of Kubernetes, automated deployment, scaling, and operation of application containers across a cluster of hosts.	Must have features of provisioning, operations and lifecycle management, automated deployment, scaling, and operation of application containers across a cluster of hosts.
32	Page No 12	Appliance must support on demand Kubernetes, compliance to the same must be confirmed by OEM	Appliance must support on demand Virtualization, compliance to the same must be confirmed by OEM

34	Page No 12	The solution shall come with various pre-installed software including Software Defined Storage with Enterprise class Storage Services	The solution shall come with various pre-installed software including Software Defined Storage with Enterprise class Storage Services

Sr.No in Page	**Page No in RFP**	**Per Physical Node Technical Specification: (4 Nodes)**		**Corrigendum**
4	Page No 13	Storage Volume	6 x 3840GB or above NVMe (M.2 / U.2) SSDs	6 x 3840GB or above on NVMe SSD or 20TB usable on NVMe SSD as per solution requirement.
S.No in Page	**Page No in RFP**	**IV.**	**Backup Activity**	**Corrigendum**
1	Page No 14	Backup	Backup of all VMs has to take in proposed Unified Storage with Parallel computing Solution. Backup connectivity should be included in offer.	Backup of all VMs has to take in proposed Unified Storage with Parallel computing Solution. Bidder can offer application if their OEM architecture required the same, then complete H/W and S/W should be perpetual and with 5 years support.

Additional Clauses in RFP	
Other Tender condition:	**Corrigendum**
5. Offered Nodes should be compliant for VMware/Nutanix, RHEL and Microsoft for future expandability.	Offered Node or appliance should be compliant for VMware/Nutanix, RHEL and Microsoft for future expandability.
Eligibility Criteria and Other Terms:	
3. OEM must have deployed atleast 2 solutions or Private Cloud solutions at Govt Organizations in past, PO Copy to submit with bid	3. OEM must have deployed at least 2 HCI solutions or Private Cloud solutions at Govt Organizations in past, PO Copy to submit with bid

Note: Rest of the specifications, terms & conditions are as per the tender notice NIT/IT-01/2024.