

Prebid Responses for ENQUIRY NO: IITGOA/2019-20/010 DTD 31/05/2019				
S.NO	Section	TenderClause	BIDDER's QUERY	RESPONSE
1	Page No. 13: Annexure B:	The bidder should agree to provide the following spares free of cost. Please attach a separate sheet in your technical bid agreeing for the same. (A) 600 GB 10K RPM SAS Drive – One (1) unit (B) 1 x 400GB SATA SSD with endurance of 3 DWPD for 5 years – One (1) unit (C) 2TB or higher capacity 7.2K RPM Enterprise SATA or NL-SAS disks – One (1) unit (D) IEC 14 Type Power Cables – Two (2) units (E) 192 GB DDR4 RAM with minimum 2666MHz ECC Memory – Two (2) units NOTE: Bidder needs to provide the compliance sheet for Annexure B in tabular format for each point mentioned above	Kindly confirm whether we should provide total 384 GB RAM(2 x 192 GB) OR 2 no. of modules of 16 GB{Part of 12 x 16 GB RAM(Total 192 GB)}.	Refer Corrigendum
2	Page 6: PART II: Instruction to Bidders:	A bid has to be supported with original catalogue (not photo copy) of the quoted model duly signed by the principals and the same must be sent along with the technical bid.	Copies of product catalogues are downloadable from OEM's website & it's verifiable as well. So kindly allow to submit the online downloadable copy of product catalogue.	Allowed
3	Page 18: Scope of Work:	Installation and commissioning of Storage subsystem and demonstration of 5GB/s write throughput	Here it's mentioned 5GB/s write throughput whereas in page no. 16(Technical Specification: 1.5: Storage: 1.5.1: Its mentioned 4 GB/s write throughput performance. Please clarify whether 4 GB/S or 5 GB/s write throughput is required ?	Refer Corrigendum
4		Bidder must have supplied and installed at least two HPC systems having peak compute power of min. 50 TF and at least one PFS based storage system of min. 50 TiB capacity in India. The purchase orders and their installation reports for these should be submitted and must be in the name of the bidder. The bidder must be the lead bidder for the submitted purchase orders and their installation reports.	1. Since IIT is asking for MAF from OEM we request you to have the work Bidder/OEM on the below mention clause no. 4 of Annexure B – Eligibility Criteria since on clause 5 you have mention the OEM should have “The server OEM should have successfully installed minimum one (1) number of HPC Cluster having peak compute power of min 100TF of capacity in India in last 3 years. Documentary evidence (Installation Report) to this effect must be produced” Suggested changes on the clause no. 4 of Annexure B – Eligibility Criteria Bidder/OEM must have supplied and installed at least two HPC systems having peak compute power of min. 50 TF and at least one PFS based storage system of min. 50 TiB capacity in India. The purchase orders and their installation reports for these should be submitted and must be in the name of the OEM/bidder. The OEM/bidder must be the lead bidder for the submitted purchase orders and their installation reports.”	No change
5			2. We would suggest you have performance certificate than purchased order and installation report as this certificate will give you correct information of the performance of the HPC Systems by OEM.	No change

6			3. We would also suggest you, to ask the bidder that installation should be done by the OEM with the bidder.	No change
7			<p>The OEM should have at least three installation in the list for past three years.</p> <p>This would prevent OEMs like Acer, ASUS to quote who do not have any presence in Top 500 supercomputer list. Top 500 super computer list is where OEMs who have installed world's top 500 super performing list.</p> <p>We request you to add them to have fair competition with all top companies like HP, Dell, Cray, Atos, Lenovo would be able to quote.</p>	No change
8	Master Node:HDD	6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5 and 50	We request that this clause be amended as "6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5, 50 and 6 with min 2GB NVCache"	No change
9	CPU only compute nodes	Two 1GbE network port with PXE boot capability	We request that this clause be relaxed to "One 1GbE network port with PXE boot capability"	Refer Corrigendum
10	CPU only compute nodes:Power supply	80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14 type).	We request that this caluse be relaxed to "80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14/ 19 type)."	Refer Corrigendum
11	GPU Node:GPU	2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least two additional cards (Future Expansion)	We request that this caluse be relaxed to "2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least one additional cards (Future Expansion)" Dell support 3 x Dual Height Dual width cards per 2U server.	Refer Corrigendum
13	Master Node:HDD	6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5 and 50	We request that this clause be amended as "6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5, 50 and 6 with min 2GB NVCache"	No change
14	CPU only compute nodes	Two 1GbE network port with PXE boot capability	We request that this clause be relaxed to "One 1GbE network port with PXE boot capability"	Refer Corrigendum
15	CPU only compute nodes:Power supply	80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14 type).	We request that this caluse be relaxed to "80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14/ 19 type)."	Refer Corrigendum
16	GPU Node:GPU	2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least two additional cards (Future Expansion)	We request that this caluse be relaxed to "2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least one additional cards (Future Expansion)" Dell support 3 x Dual Height Dual width cards per 2U server.	Refer Corrigendum
17	Master Node:HDD	6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5 and 50	We request that this clause be amended as "6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5, 50 and 6 with min 2GB NVCache"	No change
18	CPU only compute nodes	Two 1GbE network port with PXE boot capability	We request that this clause be relaxed to "One 1GbE network port with PXE boot capability"	Refer Corrigendum
19	CPU only compute nodes:Power supply	80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14 type).	We request that this caluse be relaxed to "80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14/ 19 type)."	Refer Corrigendum

20	GPU Node:GPU	2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least two additional cards (Future Expansion)	We request that this clause be relaxed to "2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least one additional cards (Future Expansion)" Dell support 3 x Dual Height Dual width cards per 2U server.	Refer Corrigendum
21	Part III: Conditions of Contract 12. Installation: (Page no.9)	Installation / demonstration to be arranged by the supplier free of cost and the same is to be done at site within the 90 days' work period.	Request to change work period to minimum 16 weeks .	No change
22		Storage	Storage Write Throughput has mention of 4GBps and 5GBps in the tender. Please confirm what performance we have to demonstrate.	Refer Corrigendum
23			Additional request from Lenovo is to please allow demonstrating the performance during acceptance only and relax submitting of Storage Write throughput which is IOR benchmark along with bid.	Allowed but bidder need to provide reference benchmark for the quoted storage subsystem along with the bid.
24		Per Node Linpack Rmax performance of min. 70% of the theoretical peak value for the compute nodes.	please confirm if this is to be achieved using intel compilers. Also with the CPU qualifying here we do not expect to get HPL more than 68% using Intel Compilers. Request to please help amend this to acceptable level.	Refer Corrigendum
25		Per Node Linpack Rmax performance of min. 65% of the theoretical peak value for GPU compute nodes.	please confirm if we need to demonstrate 65% on GPU only and not combination of CPU and GPU	Refer Corrigendum
26		List of Present Clientele to whom identical or similar equipment has been supplied in the preceding three years must be produced with contact addresses & telephone numbers.	is this ask is for OEM or Bidder?	Bidder
27		GPU node: 2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least two additional cards (Future Expansion).	we can offer Server capable to take upto 2 GPU card per node but cannot have provision for future expansion of GPU card. Requesting to please relax this clause of future expansion on GPU card.	Refer Corrigendum
		The server OEM should have successfully installed minimum one (1) number of HPC Cluster having peak compute power of min 100TF of capacity in India in last 3 years. Documentary evidence (Installation Report) to this effect must be produced	Request you to amend the clause to "in the last 5 years" - we have an entry in TopSC India in the last 5 years. We also have most recent PO (2019) meeting or exceeding the prescribed capacity - but the installation is almost complete (being carried out now) - request you to accept reference letter of supply as evidence.	Refer Corrigendum
		(E) 192 GB DDR4 RAM with minimum 2666MHz ECC Memory – Two (2) units	Should this be interpreted as 16GB DIMMS X 2 qty or 16GB DIMMS x24 quantity (192GB X2) ? OR spare memory worth two compute nodes ?	Refer Corrigendum
		Primary Communication Network	Are you open to consider Intel Omnipath - it fits in the same segment of high speed interconnect for HPC	Refer Corrigendum
		i. Per Node Linpack Rmax performance of min. 70% of the theoretical peak value for the compute nodes	Request you to relax this to 65%	Refer Corrigendum
		ii. Per Node Linpack Rmax performance of min. 65% of the theoretical peak value for GPU compute nodes.	Request you to relax this to 60%	Refer Corrigendum

			1. The memory configuration asked in the tender for Master and Compute nodes is 192GB and is favoring one particular processor vendor. Request you to please allow us to quote with the over all system memory which is 16NodesX 192GB = 3TB with as many nodes as required meeting the overall system core count.	No change
			2. The above will ensure IIT-Goa to get better performing and more efficient HPC system	No change
			3. Request you to please relax the 2.5Ghz of processor frequency to 2.4Ghz. This allows more options for the bidders to choose an appropriate CPU.	Refer Corrigendum
			4. On Compute Nodes, Request IIT to consider the 2U Rack servers instead of 2U-4Node systems which will require specialized cooling systems.	No change
			Per node CPU Linpack efficiency requirement : Page 9. Indicates the Linpack RMax performance requested to be 70% per node and 65% for the cluster. We would request to change the per node performance to 65% - this will help in inclusion for more number of Processor Model numbers qualifying to help with a much more competitive and competent bid, also since this is HPC cluster with a request for 65% Rmax we see that this change will not affect the application run performance aspect for multiple users. If there is a specific requirement for the 70% per node performance please do let us know so we are happy to help with more information from our experts.	Refer Corrigendum
			Inclusion for Intel Omni Path Architecture : While studying the tender we have noticed that the HPC interconnect technology for the cluster is being called out as "Infiniband EDR Switch". We have been in discussion with multiple bidders for other Intel components for the tender and they have shared with us their interest to quote OPA for the tender as well but they have mentioned that the tender guidelines prohibit them from doing so.	Refer Corrigendum
			Please also note that considering the given compute node count mentioned in the tender Intel OPA will be able to provide more expansion ports as we have a 48 port switch as compared to the 36 port switch specified in the Tender also considering the size of the cluster we find the OPA 24 port switch will suffice the requirement and allow for possibilities of a more competitive.	No change