

Director's Office
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12-20



संगणक विज्ञान एवं अभियांत्रिकी विभाग
मोतीलाल नेहरू राष्ट्रीय प्रौद्योगिकी संस्थान इलाहाबाद
इलाहाबाद-211004 (भारत)

Department of Computer Science & Engineering
Motilal Nehru National Institute of Technology Allahabad
Allahabad - 211 004 (India)

No. 412/CSED/2019

Dated: November 27, 2019
28

Director

Sub.: Regarding Procurement of High Performance Computing Equipment.

References:-

- (i) Technical Compliance Sheet (Annexure-I)
- (ii) Qualification Criteria Compliance Sheet (Annexure-II)
- (iii) Letter of approval seeking clarification from bidders regarding documents as per their claims in the respective bid. (Annexure-III)
- (iv) Responses received from bidders against clarifications. (Annexure-IV)
- (v) Letter No: 276/TEQIP-III/2019-20 dated 27/09/2019. (Annexure-V)

Recommendation:-


It may be noted that four bids were received against tender reference no: TEQIP-III/mnni/13 dated 22/07/2019 for procurement of "High Performance Computing Equipment", which were opened on 30/08/2019. Subsequently the bids received were sent to the committee members for evaluation on 27/09/2019.

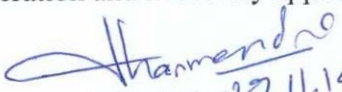
The bids were evaluated by the committee members. It was observed that due to lack of clarity and absence of relevant documents it was difficult to ascertain the compliance of the bids as per the evaluation criteria requirements. Subsequently, email requests were sent to respective bidders for seeking clarifications on their claims.


However, the committee observed that clarifications received from bidders against the request made, were still not sufficient to support the claims made by them in their respective bids for compliance of requirements.

Thus, none of the bidders qualify the evaluation criteria as per tender document. The committee recommends for re-tendering with modified evaluation criteria for procuring the same.

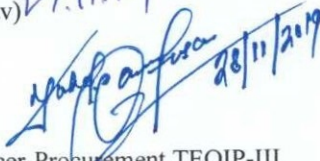
It is submitted for your consideration and necessary approval as per rules.

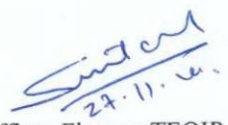

(A. K. Singh)
Head & Indenter


(D.K. Yadav)
Member


(Mayank Pandey)
Member


Coordinator TEQIP-III


Nodal Officer-Procurement TEQIP-III


Nodal Officer-Finance TEQIP-III

TECHNICAL COMPLIANCE SHEET

High Performance Computing Equipment (TEQIP-III/mnni/13) dated 30/08/2019

Sl.No.	Parameter	Technical Description	Qty.	M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai	M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor-GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai	M/s. Paramatrix Info Solutions Pvt. Ltd., SCO-112-113, Sec.-34/A, Chandigarh	M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block-A, 19, Canal South Road, Kolkata
				Firm-1	Firm-2	Firm-3	Firm-4
Part-1-HPC Computation Infrastructure				DELL PowerEdge R540 Server	HPE ProLiant DL380 Gen10		1x SuperSever 6029P-TR
1. Master/Login Node(s)			01 No.				
1	Processor	2 x IntelXeon Scalable processors (Formerly codenamed Skylake) with x86_64 architecture, each having 16-cores or higher, running @ 2.1GHz or higher. Must be capable of supporting memory running at 2666 MHz. Peak performance of each CPU should be 1075 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)		02 Nos. x Intel Xeon Gold 6130 2.1G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666	Complied Intel 6130	Complied Intel Xeon Scalable 6230, 20c, 2.1GHz cascade Lake	Complied 2xIntel ^R Xeon ^R Gold 6230 (20-Core, 2.1 GHz, 27.5MB Cache, DDR4-2666) Theoretical Peak Performance-1344 GFLOPS per CPU
2	Memory	192GB DDR4-2666 with ECC or higher in balanced configuration populating all memory channels. Must have free memory slots to upgrade further by adding memory modules (at least 16 DIMMs).		192 GB (12Nos. x 16GB RDIMM, 2666MT/s), DDR4-2666 16 DDR4 DIMM Slots	Complied	Complied 24 DIMM Slots in total, 12 x 16 GB memory offered, 12 DIMM slots empty, 16 Not possible as max 24 DIMM slots are possible and for balance 12 DIMM slots to be used.	Complied
3	RAID	Support for Hardware RAID6 with 2GB NV /flash backed cache.		PERC H730P RAID Controller, 2GB NV Cache, Adapter Supports, RAID 0, 1,5,6, 10,50,60	Complied	Complied	Complied
4	Disks	2 x 480GB TLC SATA SSDs as RAID1 Corrigendum: TLC or latest with higher performance SATA SSD's 4 x 4TB, 7200RPM SATA HDDs as RAID6 All disks must be hot-pluggable and enterprise/data centre grade and connected to RAID controller		2 Nos. x 480GB SSD 6Gbps 2.5 in Hot-plug 04 Nos. x 4TB 7.2K RPM NLSAS 3.5in Hot-plug Hard Drive	Complied	Complied	Complied
5	Optical Disk	DVDROM drive		01 No. x DVD+/-RW, SATA, Internal	Complied	Complied	Complied

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				Firm-1	Firm-2	Firm-3	Firm-4
6	NIC	2 x 1Gigabit (RJ45) ports or higher		Dual-Port 1GbE On-Board LOM	Complied	Complied	Complied
7	Interconnect	1 x 100Gbps (or higher) low-latency interconnect (Mellanox EDR InfiniBand or Intel® Omni-Path) connected to PCIe 3.0 x16		01 No. x Mellanox ConnectX-4 Single Port, EDR, VPI QSFP28 Full Height Network Adapter	Complied	Complied OPA	Complied
8	Management	Dedicated management port with KVM over LAN support enabled		Complied	Complied	Complied	Complied
9	Expansion	2 x free PCIe x16 expansion slots		Complied	Complied	Complied	Complied
10	Ports	1 Serial, 2 USB, 1 VGA / HDMI port		Front ports: Video, 1 x USB 2.0, dedicated iDRAC Direct USB Rear Ports: Video, Serial, 2 x USB 3.0, dedicated iDRAC network port	Complied	Complied	Complied
11	Form Factor	Rack-mountable with rail-kit. 2U or lower		2U Rack-moutable with rail-kit	Complied	Complied 2U	Complied
12	Power Supplies	Hot-pluggable and N+N redundant, 80PLUS Platinum or better.		Dual, Hot-plug, Redundant Power Supply (1+1), 750W	Complied	Complied	Complied
2. Compute Node(s)			16 Nodes	DELL PowerEdge R440 Server	HPE ProLiant DL360 Gen 10		4xSuperServer 6029 TP-HTR
1	Processor	2 x Intel Skylake processors with x86_64 architecture, each having 16-cores or higher, running @ 2.1GHz or higher. Must be capable of supporting memory running at 2666 MHz. Peak performance of each CPU should be 1075 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)		02 Nos. x Intel Xeon Gold 6130 2.1G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666	Complied	Complied Intel Xeon Scalable 6230, 20c, 2.1 GHz cascade Lake	Complied 2xIntel ^R Xeon ^R Gold 6230 (20-Core, 2.1 GHz, 27.5MB Cache, DDR4-2666) Theoretical Peak Performance-1344 GFLOPS per CPU





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				Firm-1	Firm-2	Firm-3	Firm-4
2	Memory	16 nodes with 192GB DDR4-2666 with ECC or higher, in balanced configuration populating all memory channels. Must have free memory slots to upgrade further by adding memory modules (at least 16 DIMMs)		192 GB (12Nos. x 16GB RDIMM, 2666MT/s), DDR4-2666 16 DDR4 DIMM Slots	Complied	Complied 24 DIMM Slots in total, 12 x 16 GB memory offered, 12 DIMM slots empty, 16 Not possible as max 24 DIMM slots are possible and for balance 12 DIMM slots to be used.	Complied
3	Disks	1 x 480GB TLC SATA SSD		01 No. x 480GB SSD SATA Mix Use 6Gbps 2.5in Hot-plug Drive	Complied	Complied	Complied
4	NIC	2 x 1Gigabit (RJ45) ports		Dual-Port 1GbE On-Board LOM	Complied	Complied	Complied
5	Interconnect	1 x 100Gbps (or higher) low-latency interconnect (Mellanox EDR InfiniBand or Intel® Omni-Path) connected to PCIe 3.0 x16		Mellanox ConnectX-5 Single Port EDR VPI QSFP28 infiniband Adapter, PCIe Full Height	Complied Intel OPA	Complied OPA	Complied
6	Management	Dedicated management port with KVM over LAN support enabled		Complied	Complied	Complied	Complied
7	Expansion	1x free PCIe x16 expansion slot		Complied	Complied	Complied	Complied
8	Ports	2 USB, 1 VGA		Front Ports: Video, 1 x USB 2.0, available USB 3.0 Rear ports: Video, Serial, 2xUSB 3.0	Complied	Complied	Complied
9	Form Factor	1U Rack-mountable with rail-kit or Dense multi-node systems with either 2 nodes in 1U /4 nodes in 2U		1U Rack-moutable with rail-kit	Complied 1U	Complied 1U rack moutable	Complied
10	Power Supply	hot-pluggable and N+N redundant, 80PLUS Platinum or better.		Dual, Hot Plug, Redundant Power Supply (1+1), 550W	Complied	Complied	Complied

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				Firm-1	Firm-2	Firm-3	Firm-4
3. GPU CCompute Node(s)			02 Nodes	DEL PowerEdge R740 Server	HPE ProLiant DL380 Gen10		2 x SuperSever 1029GP-TR
1	Processor	2 x Intel Skylake processors with x86_64 architecture, each having 16-cores or higher, running@ 2.1GHz or higher. Must be capable of supporting memory running at 2666 MHz. Peak performance of each CPU should be 1075 GFLOPs or more (with turbo frequency and hyper- threading feature disabled)		02 Nos. x Intel Xeon Gold 6130 2.1G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666	Complied	Complied Intel Xeon Scalable 6230, 20c, 2.1 GHz cascade Lake	Complied 2xIntel ^R Xeon ^R Gold 6230 (20-Core, 2.1 GHz, 27.5MB Cache, DDR4-2666) Theoretical Peak Performance-1344 GFLOPS per CPU
2	GPU	2 x Nvidia Tesla V100 with 16GB supporting upgrade upto 4 GPUs Corrigendum: 2 x Nvidia Tesla V100 with 16GB or higher supporting upgrade upto 3 GPU s or more		02 Nos. x NVIDIA Tesla V100 16G Passive GPU Server supporting upgrade upto 3 GPUS or more	Complied	Complied	Complied
3	Memory	192 GB DDR4-2666 with ECC or higher in balanced configuration populating all memory channels.		192 GB (12Nos x 16GB RDIMM, 2666MT/s, DDR4)	Complied	Complied	Complied
4	Disks	1 x 480GB TLC SATA SSD		01 Nos. x 480GB SSD SATA Mix Use 6Gbps 2.5in Hot-Plug Drive	Complied	Complied	Complied
5	NIC	2 x 1Gigabit (RJ45) ports		Broadcom 5720 Quad Port 1GbE BASE-T	Complied	Complied	Complied
6	Interconnect	1 x 100Gbps (or higher) low-latency interconnect (Mellanox EDR InfiniBand or Intel® Omni-Path) connected to PCIe 3.0 x16		01 No. x Mellanox ConnectX-4 Single Port, EDR, VPI QSFP28 Full Height Network Adapter	Complied	Complied OPA	Complied
7	Management	Dedicated management port with KVM over LAN support enabled		Complied	Complied	Complied	Complied
8	Form Factor	Rack-mountable with rail-kit. 2U or lower		2U Rack-mountable with rail-kit	Complied	Complied	Complied
9	Power Supplies	Hot-pluggable and N+N redundant, 80PLUS Platinum or better.		Dual, Hot-Plug, Redundant Power Supply (1+1), 1600W	Complied	Complied	Complied

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				Firm-1	Firm-2	Firm-3	Firm-4
	NOTE	Bidders have to offer Total Linpack theoretical peak performance (CPU-CPU performance only) of at least 38.7Tera Flops from 18 Nodes (Including all types of compute nodes part of HPC) and sustained performance must be 65% of peak performance (Performance of GPUs not part of it.)		Complied	Not Quoted	Complied	Complied Linpack theoretical peak performance (CPU-CPU performance only) > 48TF from 18 Nodes HPL Efficiency atleast 65%
		(b) STREAM 'TRIAD' (http://www.cs.virginia.edu/stream/), measuring sustainable memory bandwidth, benchmark report shall also be submitted along with the bid.		Complied	Complied	Complied	Complied Sustainable memory bandwidth between 160-180
		(c) Benchmark report for the performance of the cluster based on MAGMA (Matrix Algebra for GPU and Multi core Architectures) [http://icl.utk.edu/magma/] shall also be submitted along with the bid.		Complied	Complied	Complied	Complied MAGMA Benchmark ran on Intel Scalable CPU based Node
PART 2 – HPC Storage Infrastructure							
5. Parallel File System			01 Set				
1	Storage	Lustre based Parallel file system with 160TB usable space and with a performance of 3GB/s or higher (with linear upgrade in performance with future expansion). The performance needs to be demonstrated using third party benchmark (IOR/IOZone) with 1MB block size, and benchmark report to be submitted with the bid.		Dell EMC ME4084 Storage Array, 08 Nos. x 1.8 TB HDD 10K 512n SAS 12 2.5 62 Nos. x 4TB HDD 7.2K 512n SAS 12 3.5	Complied	Complied	Complied

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				Firm-1	Firm-2	Firm-3	Firm-4
		The solution must have no single point of failure, providing high availability/ Performance in Active - Active Configuration. Disks must be having redundant path to I/O server so that loss of one path doesn't lead to point of failure. I/O server must be configured in failover to enable storage to recover from failure of one I/O server. Servers and storage must have redundant power supplies and must be connected to the HPC setup outlined in this tender using 100Gbps (or higher) low-latency interconnect (Mellanox EDR InfiniBand or Intel® Omni-Path).		Complied	Complied	Complied	Complied
		The solution must comprise of at-least 2 I/O servers (acting as Metadata servers / Object Storage Servers) as below:		02 Nos. x I/O Nodes	Not Quoted	Complied	Complied
A. I/O Nodes			02 or more	DELL PowerEdge R440 Server			SuperServer 1029P-WTRT
1	Processor	Dual Intel Xeon Skylake Xeon Silver 4114 (10-Core, 2.2GHz) or higher		02 Nos. x Intel Xeon Silver 4114 2.2G, 10C/20T, 9.6GT/s, 14M Cache, Turbo, HT (85W) DDR4-2400	Complied	Complied	Complied 2 x Intel ^R Xeon ^R Silver 4214 (12-Core, 2.2 GHz, 16.5 MB Cache, 85W)
2	Memory	192GB DDR4-2666 with ECC or higher in balanced configuration populating all memory channels.		192 GB (12Nos. x 16GB RDIMM, 2666MT/s),	Complied	Complied	Complied
3	Disks	2 x 480GB TLC SATA SSDs in RAID1 All disks must be hot-pluggable and enterprise/data centre grade		02 Nos. x 480GB SSD SATA Mix Use 6Gbps 2.5in Hot-plug Drive	Complied	Complied	Complied
4	NIC	2 x 1Gigabit (RJ45) ports		Dual-port 1GbE on-board LOM	Complied	Complied	Complied
5	Interconnect	1 x 100Gbps (or higher) low-latency interconnect (Mellanox EDR InfiniBand or Intel® Omni-Path) connected to PCIe 3.0 x16		01 No. x Mellanox connectX-5 Single Port EDR VPI QSFP28 Infiniband Adapter, PCIe Low Profile	Complied	Complied	Complied

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				Firm-1	Firm-2	Firm-3	Firm-4
6	Management	Dedicated management port with KVM over LAN support enabled		Complied	Complied	Complied	Complied
7	Ports	2 USB, 1 VGA		Front Ports: video, 1 x USB 2.0, available USB 3.0 Rear Ports: video, Serial, 2 x USB 3.0	Complied	Complied	Complied
8	Form Factor	Rack-mountable with rail-kit. 1U or lower		Rack-mountable with rail-kit 1U	Complied	Complied	Complied
9	Power Supplies	Hot-pluggable and N+N redundant, 80PLUS Platinum or better.		Dual, Hot Plug, Redundant Power Supply (1+1), 550W	Complied	Complied	Complied
B. Object Storage Target (OST) and Meta Data Target (MDT) Node							
1	Disks for OST	160TB or higher usable space with RAID6 or equivalent using SAS 7.2K RPM disks and with two hot-spare disks. All disks must be hot-pluggable and enterprise/data centre grade.		Complied	Complied	Complied	Complied
2	Disks for MDT	2% or more of the PFS Usable Storage Space (OST) with RAID10/1E or equivalent using SAS 10K RPM disks and with one hot-spare disk. All disks must be hot-pluggable and enterprise/data centre grade		Complied	Complied	Complied	Complied
3	Connectivity	Connected to both the I/O Servers (Meta Data Target & Object Server) for high- availability configuration using 12Gbps (or higher) links		Complied	Complied	Complied	Complied
4	Form Factor	Rack-mountable with rail-kit. 8U or lower.		Complied	Complied	Complied	Complied 4U
5	Power Supplies	Hot-pluggable and N+N redundant, 80PLUS Platinum or better.		Complied	Complied	Complied	Complied

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				Firm-1	Firm-2	Firm-3	Firm-4
III. PART 3 – HPC Communication Network Infrastructure			01 Set				
6. Communication Network							
A. Primary Communication Network							
1	Primary Communication Network	36-port or more, 100Gbps, 100% Non-blocking, Switching Fabric (Mellanox EDR InfiniBand or Intel® Omni-Path) with embedded Subnet Manager for 36 devices or more and with redundant power supply/supplies. All cables required for connecting the devices quoted in this tender should be included/bundled.		Mellanox 5B7890, EDR IB2, Unmanaged, 36 QSFP28 ports, 1U, 2xAC PSU, Ports to PSU airflow 21 Nos. x Mellanox EDR VPI EDR InfiniBand QSFP passive copper cable, LSZH, 3-meter	Complied 48-port Intel OPA	Complied 48 port OPA	Complied 1xOmni-Path Architecture 100G 48-Port Managed Switch (SSH-C48QM)
B. Secondary Communication Network							
	Secondary Communication Network	Two 24-port OR One 48 port, Layer-2 internally/externally managed, Gigabit Ethernet Switch with rack-mounting kit. All cables required for connecting the devices quoted in this tender should be included/bundled.		Dell EMC Switch N1148TON, L2, 48 ports RJ45 1GbE, 4 ports SFP+ 10 GbE, Stacking	Complied 01 No. Aruba 2930F 48G 4SFP + Switch	Complied	Complied 2 x 24 port Rackmountable switch (D-Link DGS-1024C)
7. KVM Switch/Console			01 Set				
	KVM Switch/ Console	1 x KVM console with a 17" LED-backlit LCD monitor in a sliding housing, 1U rack-mountable 2x16 port KVM switches with required cables, 1U rack-mountable		01 No. x Aten CL1000M 17" LCD console 01 No. x Aten 2L-5202Up 1.8 Mtr Console KVM cable 02 Nos. x Aten CS1316 16 port KVM switch with cable	Complied	Complied	Complied Aten CL 1000M
8. Software / Installation			01 Set				
	OS	64-bit Linux (CentOS/RHEL)		64-bit Linux (CenOS) Freeware Opensource <i>NOTE: No commercial software or any subscription included or quoted.</i>	Complied CentOS	Complied	Complied CentOS

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				Firm-1	Firm-2	Firm-3	Firm-4
1	Job Scheduler	Job Scheduler with following features: (i) job monitoring and management (ii) Workload cum resource manager with policy-aware, resource-aware and topology-aware scheduling (iii) Advance reservation support (iv) Heterogeneous cluster support (v) Multi-cluster support (vi) Pre-emptive and backfill scheduling support (vii) Application integration support (viii) Live reconfiguration capability (ix) GPU Aware scheduling		Freeware Opensource Job Scheduler software will be provided <i>NOTE: No commercial software or any subscription included or quoted.</i>	Altair PBS	Complied	Complied
2	Libraries	Open MPI, MVAPICH, Intel MPI, Blas 1,2,3, Lapack, Scalapac, Intel MKL, Intel DAAL		Freeware Opensource Libraries will be provided. Academic Purpose Intel ^R Performance Libraries https://software.intel.com/en-us/performance-libraries <i>NOTE: No commercial software or any subscription included or quoted.</i>	Complied	Complied	Complied
3	Compilers	GNU Compilers, Intel (C/C++/Fortran compilers)		Freeware Opensource Compilers will be provided. Whatever available freely available from Intel for Academic purpose. <i>NOTE: No commercial software or any subscription included or quoted.</i>	Complied	Complied	Complied

Sl.No.	Parameter	Technical Description	Qty.	M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai	M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor-GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai	M/s. Paramatrix Info Solutions Pvt. Ltd., SCO-112-113, Sec.-34/A, Chandigarh	M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block-A, 19, Canal South Road, Kolkata
				Firm-1	Firm-2	Firm-3	Firm-4
4	HPC Management	Cluster Management software with following features. i. GUI based tool to manage the entire cluster from a single window ii. Cluster manager with provisioning, monitoring and reporting capabilities iii. Support Package and Image based provisioning iv. Support both Disk and diskless cluster deployment v. Intuitive web interface to manage and customize the cluster vi. Customizing networks and compute node profiles vii. Customizing compute nodes to max, up to changing kernel parameter viii. Able to Push configuration changes and updates to the compute nodes without reinstalling and rebooting		Freeware Opensource Cluster Management Software will be provided. <i>NOTE: No commercial software or any subscription included or quoted.</i>	Complied	Complied	Complied Tyrone Cluster Manager
	Installation	The vendor has to rack-mount all equipment with proper cabling and configure the system as a high-performance compute cluster. The vendor is required to run HPL and submit results as part of acceptance. The vendor will also be required to submit documentation with details about the installation and provide training on day to day operations and administration of HPC,		Not Quoted	Not Quoted	Complied	Complied Installation will be done as per scope of work defined in tender

Sl.No.	Parameter	Technical Description	Qty.	M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai	M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor-GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai	M/s. Paramatrix Info Solutions Pvt. Ltd., SCO-112-113, Sec.-34/A, Chandigarh	M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block-A, 19, Canal South Road, Kolkata
				Firm-1	Firm-2	Firm-3	Firm-4
IV. PART 4 – Cooling Solution Infrastructure							
1.	Cooling Solution Infrastructure	<p>a. The Data Centre equipped with the appropriate Air Conditioners /cooling system will be provided by MNNIT Allahabad</p> <p>b. Bidders may plan to distribute total no. of IT equipments (Servers, Switches, Storage units) among 2 racks maximum, so the solution should be designed accordingly.</p> <p>c. Raw Power via UPS Units required to be fed to the rack units will be provided by MNNIT Allahabad</p> <p>d. Complete cooling requirement in terms of AC Tonnage required must be spelled out in the bids with no ambiguity.</p> <p>e. Distribution of equipment for uniform cooling requirement for each rack must be taken care of by the bidder, and laying out the equipment should be in accordance.</p>		MNNIT Scope	Complied	Complied	Noted: Under the Scope of MNNIT Allahabad. The solution is designed on order to get fit in existing infrastructure
					Complied	Complied	
					Complied	Complied	
					Not Quoted	Complied	
					Not Quoted	Complied	
		NOTE: Electrical system with essential high quality MCB and cables for UPS and Rack (input supply to rack units) shall be set up by the MNNIT Allahabad.		MNNIT Scope	Complied	Complied	
9. 42U Server Industrial Racks							
1	Racks	Solution to be housed in either 1 or 2 racks at the maximum		Solution will be housed in One Rack only	Complied	Complied	Complied 1 Rack for housing entire solution
10. Warranty							
1	Warranty	Comprehensive 03 years onsite warranty for the complete solution		Comprehensive 03 years Onsite Warranty for the complete solution	Complied	Complied	Complied

Sl.No.	Parameter	Technical Description	Qty.	M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai	M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor-GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai	M/s. Paramatrix Info Solutions Pvt. Ltd., SCO-112-113, Sec.-34/A, Chandigarh	M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block-A, 19, Canal South Road, Kolkata
				Firm-1	Firm-2	Firm-3	Firm-4
11. Optional Item to be quoted							
	Optional Item to be quoted	MNNIT Allahabad desires to add more GPUs to the Cluster, thus bidders must quote for standalone 1 x Tesla V100 16GbpC1e variant as an optional item. MNNIT will decide upon the total additional GPUs to be added at the time of order finalization.		Complied But there is no Line Item Separately for this, we have mentioned in Price Bid BOQ in Bidders Name.	Complied	Complied	Complied Will offer through separate quotation as online BoQ doesn't have scope to offer optional items.

A. Singh
27/11/19
(A. K. Singh)
Head & Indenter

D.K. Yadav
27.11.19
(D.K. Yadav)
Member

Mayank Pandey
27/11/19
(Mayank Pandey)
Member

**COMPARATIVE STATEMENT OF PRICE BID FOR
High Performance Computing Equipment (TEQIP-III/mnni/13) dated 30/08/2019**

			M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai		M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor-GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai		M/s. Paramatrix Info Solutions Pvt. Ltd., SCO-112-113, Sec.-34/A, Chandigarh		M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block-A, 19, Canal South Road, Kolkata	
			Firm-1		Firm-2		Firm-3		Firm-4	
SI. No.	Brief Description of the Goods	Qty.	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1.	High Performance Computing	1.0	13841730.00	13841730.00	14713632.00	14713632.00	15999900.00	15999900.00	13728800.00	13728800.00
	TOTAL (Rs.)	1.0	13841730.00	13841730.00	14713632.00	14713632.00	15999900.00	15999900.00	13728800.00	13728800.00
	GST @ 5%		692086.50	692086.50	735681.60	735681.60	799995.00	799995.00	686440.00	686440.00
	GRAND TOTAL		14533816.50	14533816.50	15449313.60	15449313.60	16799895.00	16799895.00	14415240.00	14415240.00
	TERNS & CONDITIONS									

A. K. Singh
(A. K. Singh) 27/11/19
Head & Indenter

D.K. Yadav
(D.K. Yadav) 29.11.19
Member

Mayank Pandey
(Mayank Pandey) 27/11/19
Member

S. Shrivastava
28-11-19
Coordinator TEQIP-III

Yashdeep Singh
28/11/19
Nodal Officer-Procurement TEQIP-III

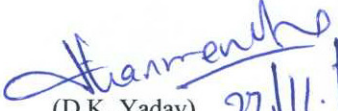
Smita
27-11-19
Nodal Officer-Finance TEQIP-III


**COMMERCIAL REQUIREMENT FOR
High Performance Computing Equipment (TEQIP-III/mnni/13) dated 30/08/2019**

Commercial Requirement	Bid Requirement	M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai	M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor-GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai	M/s. Paramatrix Info Solutions Pvt. Ltd., SCO-112-113, Sec.-34/A, Chandigarh	M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block-A, 19, Canal South Road, Kolkata
		Firm-1	Firm-2	Firm-3	Firm-4
Is minimum financial turnover met in at least once of the last three years excluding current financial year?	Required	Complied	Complied	Complied	Complied
Satisfactory delivery of similar goods/items of value not less than 80% of estimated contract value in less than 3 years	Required	Complied	Complied	Complied	Complied
GSTIN Number	Required	Complied	Complied	Complied	Complied


(A. K. Singh)
Head & Indenter


Coordinator TEQIP-III


(D.K. Yadav)
Member


Nodal Officer-Procurement TEQIP-III


(Mayank Pandey)
Member


Nodal Officer-Finance TEQIP-III

QUALIFICATION CRITERIA COMPLIANCE SHEET

High Performance Computing Equipment (TEQIP-III/mnni/13) dated 30/08/2019

Sl.No.	Parameter (QUALIFICATION CRITERIA)	M/s. Micropoint Computers Pvt. Ltd., 17/18, Navketan Industrial Estate, Opp. Onida House, Mahakali Caves Road, Andheri East, Mumbai	M/s. BrainGrid Technologies Pvt. Ltd., B-2, 14 2/3, Floor- GRD, Anna Nagar, Sant Kakkaya Marg, Dharavi, Mumbai	M/s. Paramatrix Info Solutions Pvt. Ltd., SCO- 112-113, Sec.- 34/A, Chandigarh	M/s. Netweb Technologies India Pvt. Ltd., Garments Park, Module No. F-4, 1 st Floor, CF Building, Block- A, 19, Canal South Road, Kolkata
		Firm-1	Firm-2	Firm-3	Firm-4
1	Server OEM must have installed at least 5 HPC Clusters of the same size in terms of no. of nodes, or more, with minimum performance of 20TF or higher, with Infiniband/OPA Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organisations, during last 5 years. Documentary evidence to be provided with installation reports. Server OEM must be listed in Top 500.org lists during last 2 years in at least three lists out of total four bi-yearly lists during the said tenure.	NOT COMPLIED	NOT COMPLIED	NOT COMPLIED	NOT COMPLIED
2	Storage OEM must have installed at least 1 PFS based storage systems of 100 TB in size as part of HPC in India at Govt. Education & Research Organisations. Documentary proof (PO and installation reports must be submitted with bids) during last 5 years.	COMPLIED	COMPLIED	COMPLIED	NOT COMPLIED Supporting Documents not found
3	One OEM (Server OEM) can authorize only one SI/Bidder to quote their products.	COMPLIED	COMPLIED	COMPLIED	COMPLIED
4	Bidder must have prior experience in installing at least 2 HPC clusters and at least one PFS across Govt. Education and Research Organisations in India. As a proof details of such installations should be provided along with the bid.	COMPLIED	COMPLIED	NOT COMPLIED Supporting Documents not found	COMPLIED
5	The bidder must be registered under the companies act 1956 or a registered firm. And have registered office in India.	COMPLIED	COMPLIED	NOT COMPLIED Supporting Documents not found	COMPLIED
6	The technical bid should clearly demarcate the responsibilities between the bidder and the various OEMs. Complete details of the same have to be submitted with the bid.	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	COMPLIED
7	The bidder, along with their server OEM, should have a proven record of having demonstrated their competence and capability as a team, to deliver turnkey	COMPLIED	COMPLIED	NOT COMPLIED	COMPLIED

ES Divastan
28-11-19

AS

Shannendra

MS

Chandigarh

28/11/19

	facility and in providing services similar to the one expected during the contract period.			Supporting Documents not found	
8	The bidder is required to be a company with an annual turn-over of at least three times the cost of the bid in each of the last three financial years.	NOT COMPLIED Supporting Documents not found for last three financial years	NOT COMPLIED Supporting Documents not found	NOT COMPLIED	COMPLIED
9	On Site support to be provided by the Bidder or the OEM. Declaration to be submitted along with the bid.	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	COMPLIED
10	Bidder must not be blacklisted by any Govt. Organisation in India; a notarised declaration must be submitted with the bid.	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	COMPLIED
11	Valid and Duly Authorized Manufacturer Authorization Certificate from the respective OEMs in the name of Participating System Integrator/Bidder must be submitted at the time of submission of Bids. From Server, Storage, and Switch OEMs.	COMPLIED	COMPLIED	COMPLIED	COMPLIED
12	All the components of the Server should be approved by the same OEM.	COMPLIED	COMPLIED	COMPLIED	COMPLIED (As per Declaration)
13	Regarding the benchmarks: a. Results should be submitted along with technical bid. b. Benchmarks are to be submitted for the proposed configuration only. If, exactly, the proposed configuration is not available then the benchmarks may be run on closest available configuration, and based on the result of closest available configuration benchmark results for proposed configuration may be submitted. c. Log files of the benchmark runs must be provided in electronic format. d. All the input files and output files along with the script should be provided e. Complete H/W and S/W environment of the machines (cluster) on which the benchmarks were carried out must be provided. f. An undertaking that guarantees the reproduction of the benchmark reports on the proposed cluster in our premises after final installation must be provided. In case of failing to do so (with maximum 5% deviation from the results submitted in the bid), the Institute reserves the right to decide and impose subsequent penalty. g. A two-step criterion will be used for technically qualifying the vendors.	NOT COMPLIED [IOR/IOZone] benchmark results not found	NOT COMPLIED Supporting Documents not found	COMPLIED	COMPLIED

EShivastava

W/ Hemendra

W/ Anand

W/ Anand 20/11/17

	<p>i. Best performance of High Performance LINPACK (on complete solution) benchmarks.</p> <p>ii. If (i) is satisfied, then other benchmarks shall be considered. Only those vendors whose benchmark results are within 25% of the best one will be qualified for the commercial bid.</p>				
14	At the time of installation, if it is found that some additional hardware or software items are required to meet the operational requirement of the configuration, but not included in the vendor's original list of deliverables, the vendor shall supply such items to ensure the completeness of the configuration at no extra cost.	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	NOT COMPLIED Supporting Documents not found	COMPLIED

A. K. Singh
27/11/19
(A. K. Singh)
Head & Indenter

S. S. Chivela
28-11-19
Coordinator TEQIP-III

D. K. Yadav
27.11.19
(D.K. Yadav)
Member

Pradyumn
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Nodal Officer-Procurement TEQIP-III

M. Pandey
27/11/19
(Mayank Pandey)
Member

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