

मोतीलाल नेहरु राष्ट्रीय प्रौद्योगिकी संस्थान इलाहाबाद, प्रयागराज—211004 Motilal Nehru National Institute of Technology Allahabad, Prayagraj -211004 कार्यालय तकनीकि शिक्षा गुणवत्ता सुधार कार्यक्रम (टीईक्यूआईपी – III) Office of the Technical Education Quality Improvement Programme (TEQIP-III)

## Minutes of the Meeting of Pre-bid Conference

Package Code:

TEQIP-III/2020/mnni/16

For:

Procurement of High Performance Computing Equipment in the Institute

Date & Time:

05.03.2020 at 14:30 Hrs.

Venue:

Room No. 203 Conference Hall (Purchase Office) MNNIT Allahabad

The Pre-bid Conference for the above NCB was held on 05.03.2020 at 14:30 Hrs. in Room No. 203 Conference Hall (Purchase Office) MNNIT Allahabad.

Among those in attendance included:

1. Prof. A. K. Singh, Head, CSED & Indenter

- 2. Prof. D. K. Yadav, CSED
- 3. Dr. Mayank Pandey, CSED
- 4. Prof. Vinay Kumar Srivastava Coordinator TEQIP-III
- 5. Dr. Shwetank Parihar Nodal Officer, Finance-TEQIP-III
- 6. Mr. Mohd Danish Ansari Nodal Officer, Procurement-TEQIP-III

Representatives of prospective Bidders:

SI.	Name of Firm	Represented by
1.	M/s Micropoint Computers Private Limited.	Ashok Kumar, 7666940757 Mail: umesh@mpcl.in
2.	M/s Netweb Technologies India Pvt. Ltd. B-1/A-25, 2nd Floor, Mathura Road Mohan Co-Operative Industrial Estate, New Delhi–110044	Mr. Abhay Kumar, 9953177321 abhay.kumar@netwebindia.com

- The Committee extended a warm welcome to the representatives present in the meeting.
- (ii) Works and contents of the NCB document were briefed to both the prospective bidders and various associated important provisions of the tender document were also explained.
- (iii) Queries raised by the representative were resolved in the meeting.
- (iv) It was resolved that no query from any prospective bidder shall be entertained dated: 06.03.2020.
- (v) The persons representing the above firms were requested to furnish queries, (if any), in writing latest by 06.03.2020 so that the replies to the same can be provided by the Institute. Reply to the queries raised by the firm is given in **Table-A**.

				TABLE	·A	
SI ·	Firm	NCB Reference(s) (Section, Page)	Paramete rs	Entry in NCB Document	Point of Clarification Required / Query	Resolution
1.	M/s Paramatrix Info Solution Pvt. Ltd. Chandigarh. [Query received through email dated: 05.03.2020]	Page no.44/65  – Under Section VI: Technical specification. 3. GPU nodes: b. GPU: 2 x Nvidia Tesla V100 with 32GB supporting upgrade upto 3 GPUs	GPU Nodes	2 x Nvidia Tesla V100 with 32GB supporting upgrade upto 3 GPUs	Remove the ask or scalability of GPU on GPU server upto 3. We do not see any application that gains on performance front on multi GPU environment.	As per NCB.

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2.	M/s Netweb Technologie s (I) Pvt. Ltd. [Query received through email dated: 05.03.2020]	Page no.14/65  – under 18.  Qualification/Eli gibility Criteria: Point. 18.2 -	Qualifica 'tion/Eligi bility Criteria	Server OEM must be listed in Top500. org list, with at least two installations in each list published since last two years	Please find that prescribing the aforesaid criterion will constitute non-observance of the Order issued by the PMO-D.O. 330/31/C/64/ 2015-ES-I dated 03.01.2019which expressly restricts procuring entities to incorporate mandatory certification by foreign bodies thereby excluding local manufacturers. (Copy of the said DO is enclosed as an attachment to this Letter)  The Hon'ble Karnataka High Court has also, in the Writ Petition No.45648/2013 filed in relation to a tender floated by CSIR Bangalore, expressly dissented and stayed incorporation of the requirement of "Listing in Top500 Supercomputer List", finding it to be a restrictive eligibility criterion. Therefore, in absence of concurrence from the Hon'ble HC we believe the same should be eliminated. In addition to aforesaid, please find that the Supercomputer holding 500th position (last entry) in the List is of approximately 2278TF, however, the requirement of the of the tender under consideration is around Less than 100TF. Therefore, we believe that the desired parameter for determining the credibility of the bidder needs to be reviewed and be in consonance of the requirement.  Further, Top500 Supercomputers listing is a privately controlled list based on voluntary submissions and hence carries no authenticity at all. There are a number of Supercomputers which inspite of being amongst top 500 supercomputers of the world, are not listed in it. The List suffers with numerous errors and has not been recognized by any Indian National Authority as such. Thus, in absence of any recognition we believe the said should not be included the eligibility requirements.	Accepted as below. Server OEM must be listed in top 500.org lists during lass two years in at least 3 lists out o total four bi yearly lists.
	3 (1970) AR 1985 3 (1970)				Authority as such. Thus, in absence of any recognition we believe the said should not be included the eligibility requirements.  We request MNNIT-Allahabad Officials to remove this restrictive Criteria from Tender	
		Page no.14/65  – under 18. Qualification/Eli gibility Criteria: Point. 18.6 -	Qualifica tion/Eligi bility Criteria	The OEM and bidder should be a registered company in India under the companies act 1956/ registered firm and should have been in operation in India for	Since the Tender Criteria mentioned at Pg 14 Pt. 18.7 allows Services and Support from either Bidder or OEM, hence OEM Company Registration in India should not be made mandatory qualification requirement	Accepted as below: OEM or bidder should be a registered company in India under the

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				a period of at least 5 years as on date of Tender. The OEM and bidder should have registered office in India. A copy of certificate of incorporation/ registration should be enclosed.	There are certain OEM's who are providing Installation Services and Technical Support thru there Authorized Support partners in India. Hence we request you to please allow Bidder's with proven credentials also to do Installation and After Sales Services We request MNNIT-Allahabad Officials to change clause to "The OEM or bidder should be a registered company in India under the companies act 1956/ registered firm and should have been in operation in India for a period of at least 5 years as on date of Tender. The OEM or bidder should have registered office in India. A copy of certificate of incorporation/ registration should be enclosed	companies act 1956/ registered firm and should have been in operation in India for a period of at least 5 years as on date of Tender. The OEM or bidder should have registered office in India. A copy of certificate of incorporatio n/ registration should be enclosed.
		Page no.12/65 – under 15. Bid Security	Bid Security	Bid Security	Please consider EMD Exemption will be given to NSIC or MSME Registered Firms as per Government Rules	Exemption to NSIC or MSME registered firms as per GFR 2017.
3.	M/s Lenovo Global Technology (I) Pvt Ltd [Query received through email dated: 05.03.2020]	Page no.44/65  – Under Section VI: Technical specification. 3. GPU nodes: b. GPU: 2 x Nvidia Tesla V100 with 32GB supporting upgrade upto 3 GPUs	GPU Node	2 x Nvidia Tesla V100 with 32GB supporting upgrade upto 3 GPUs	Lenovo would like to request MNIT to drop the ask or scalability of GPU on GPU server upto 3. We do not see any application that gains on performance front on multi GPU environment.	As per NCB.
4.	M/s Locuz Enterprise Solution Ltd. [Query received through	Page no.12/65 Para 15	Bid Security	Bid Security Amount (Rs. 8,37,620/=)	We are a MSME/NSIC registered company for specified item. You are requested to let us know if we can avail Bid Security exemption against these certificates.	Exemption to NSIC or MSME registered firms as per GFR 2017.
	email dated: 04.03.2020]	Page no.62/65 Annexure XV	Annexur e XV	Proforma for Equipment and Quality control employed by the manufacturer	We understand this Annexure is required to be submitted after award of contract. Please confirm if this is to be submitted along with technical bid.	Along with the Bid Submission
	yar Talzozu	Page no.44/65 1. Master Nodes	Process	2 x Intel Xeon Scalable processors (Formerly codenamed Cascade lake) with x86_64 architecture, each having 20 cores or higher, running @ 2.1GHz	We request that the supporting memory be capable of running at a min of 2933 Mhz, as cascadelake CPUs support 2933MHz. 2666MHz memory will render a suboptimal system	Accepted

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	, and a second s	or higher. Must be capable of supporting memory running at 2666 MHz Peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  192GB DDR4-2666	We request that this slaves he showed	Accorded
	Memory	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)	We request that this clause be changed to "192GB DDR4-2933" 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)	Accepted
Page no.44/65 2. Compute Nodes	Process	2 x Intel Xeon Scalable processors (Formerly codenamed Cascade lake) with x86_64 architecture, each having 20-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 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)	We request that the supporting memory be capable of running at a min of 2933 Mhz, as cascade lake CPUs support 2933MHz. 2666MHz memory will render a sub-optimal system	Accepted
	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)	We request that this clause be changed to "16 nodes with 192GB DDR4-2933 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)"	Accepted
Page no.44/65 3. GPU Nodes	Process or	2 x Intel Xeon Scalable processors (Formerly codenamed Cascadelake) with x86_64 architecture,	We request that the supporting memory be capable of running at a min of 2933 Mhz, as cascadelake CPUs support 2933MHz. 2666MHz memory will render a sub-optimal system	Accepted

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	an ar lead		each having 20- cores or higher running @ 2.1GHz or higher. Must be capable of supporting memory	econye   Dela Derio Se	
			running at 2666 MHz. Peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)		
		Memory	192 GB DDR4-2666 with ECC or higher, in balanced configuration populating all memory channels	We request that this clause be changed to " 192 GB DDR4-2933 with ECC or higher, in balanced configuration populating all memory channels"	Accepted
	Page no.45/65 4. PFS Storage System-160TB (with 2 I/O nodes)	Parallel File System	a. 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).	We request you to include BeeGFS alongside Lustre PFS.	Accepted as below:  Lustre PFS  / BeeGFS with 160 TB usable space and with a performance of 3GB/s or higher (with linear upgrade in performance with future expansion).
CESS TO MA	Page no.45/65 A. I/O Nodes	Memory	192GB DDR4 - 2666 with ECC or higher in balanced configuration populating all memory channels	We request this clause to be changed to " 192GB DDR4 - 2933 with ECC or higher in balanced configuration populating all memory channels"	Accepted
		Form Factor	Rack-mountable with rail-kit. 1U or lower	We request you to relax this clause to "Rack-mountable with rail-kit. 2U or lower"	Accepted
	Page no.14/65 18. Qualification/Eli gibility Criteria	18.1 Qualifica tion/Eligi bility Criteria	Server OEM must have installed at least 3 HPC Clusters of the same size in terms of no. of nodes, or more, with minimum performance of 25TF 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.	We request you to change this clause to: Server OEM must have installed at least 3 HPC Clusters of the same size in terms of no. of nodes, or more, with minimum performance of 25TF or higher, with Infiniband/OPA/10G 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.	As per NCB
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	r	provided with		
Nodes - ed:	Process 2	2 x Intel Xeon Scalable processors (Formerly codenamed Cascade lake) with x86_64 architecture, each having 20 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 1344 GFLOPs or more (with turbo frequency and hyper-threading	be capable of running at a min of 2933  Mhz, as cascadelake CPUs support 2933MHz. 2666MHz memory will render	Accepted
	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	We request that this clause be changed to "192GB DDR4-2933 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)	Accepted
Page no.44/65 2. Compute Nodes	Process or	2 x Intel Xeon Scalable processors (Formerly codenamed Cascade lake) with x86_64 architecture, each having 20-cores or higher running @ 2.1GHz or higher. Must be capable or supporting memory running at 2666	be capable of running at a min of 2933 Mhz, as cascadelake CPUs support 2933MHz. 2666MHz memory will render a sub-optimal system	
		performance of each CPU should be 1344 GFLOPs of more (with turbe frequency and hyper-threading)	fdd	
	Memory	16 nodes with 192GB DDR4-266 with ECC or higher in balance configuration	to 16 nodes with 192GB DDR4-2933 with to 16 nodes with 192GB DDR4-2933 with ECC or higher, in balanced configuration populating all memory channels. Must have free memory slots to upgrade further	n st er
	ed: D]  Page no.44/65 2. Compute	Page no.44/65 1. Master Nodes  ed: 0]  Page no.44/65 2. Compute Nodes  Process or Section of Sectio	Page no.44/65 I. Master Nodes  Process 2 x Intel Xeon Scalable processors (Formerly codenamed Cascade lake) with x86_64 architecture, each having 20 cores or higher, running @ 2.1CHz or higher. Must be capable of supporting memory running at 2666 MHz Peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory  Page no.44/65 I. Memory  Memory  Memory  Page no.44/65 I. Memory  Page no.44/65 I. Compute Nodes  Process I. Master Value Peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Page no.44/65 I. Memory  Page no.44/65 I. Memory  Page no.44/65 I. Memory  Memory  Page no.44/65 I. Memory  Memory  Page no.44/65 I. Memory  Page no.44/65 II Memory  II Memory  Page no.44/65 II Memory	Page no.44/65 Process or Scalable processors (Formerly codenamed Cascade lake) with x86 84 architecture, each having 20 cores or higher, running at 2666 MHz Peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory 1928 DDR4-2666 with ECC or higher in balanced configuration populating all memory codenamed Cascade lake) with x86 84 architecture, each having 20 cores or higher, funning at 2666 MHz peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory 1928 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)  Page no.44/65 Process or Compute (Cascade lake) with x86 64 architecture, each having 20 cores or higher running 2 (21GHz or higher, Must be capable of supporting memory running at 2666 MHz. Peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory 1928 DDR4-2933 with 2000 populating all memory channels. Must have free memory slots to upgrade further by adding memory modules (at least 16 DIMMs)  We request that the supporting memory by adding memory modules (at least 16 DIMMs)  We request that the supporting memory as ub-optimal system with the peak performance of each CPU should be 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory 1928 DDR4-2933 with turbo frequency and hyper-threading feature disabled)  Memory 1928 DDR4-2933 with turbo frequency and hyper-threading feature disabled to 16 nodes with 1926B DDR4-2933 with turbo frequency or higher, in balanced configuration have free memory slots to upgrade further bave free memory slots to upgrade further have free memory slots to upgrade further bave free memory slot

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		Must have free		
		upgrade further by adding memory modules (at least 16 DIMMs)		
Page no.44/65 3. GPU Nodes	Process	2 x Intel Xeon Scalable processors (Formerly codenamed Cascadelake) with x86_64 architecture, each having 20-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 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)	We request that the supporting memory be capable of running at a min of 2933 Mhz, as cascadelake CPUs support 2933MHz. 2666MHz memory will render a suboptimal system	Accepted
	Memory	192 GB DDR4-2666 with ECC or higher, in balanced configuration populating all	We request that this clause be changed to " 192 GB DDR4-2933 with ECC or higher, in balanced configuration populating all memory channels"	Accepted
Page no.45/65 3. PFS Storage System- 160TB (with 2 I/O nodes) A. I/O Nodes	b. Memory	192GB DDR4 - 2666 with ECC or higher in balanced configuration populating all	We request that this clause be changed to " 192GB DDR4 - 2933 with ECC or higher in balanced configuration populating all memory channels"	Accepted
	h. Form Factor	Rack-mountable with rail-kit. 1U or lower	We request that this clause be relaxed to "Rack-mountable with rail-kit. 2U or lower"	Accepted
Page no.14/65 Qualification/Eli gibility Criteria	18.1	18.1 Server OEM must have installed at least 3 HPC Clusters of the same size in terms of no. of nodes, or more, with minimum performance of 25TF or higher, with	Server OEM must have installed at least 3 HPC Clusters of the same size in terms of no. of nodes, or more, with minimum performance of 25TF or higher, with Infiniband/ OPA/10G Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, during last 5 years.	As per NCB
		Infiniband/ OPA Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, during last 5 years. Documentary evidence to be provided with	with installation reports	nd ?
	Page no.45/65 3. PFS Storage System- 160TB (with 2 I/O nodes) A. I/O Nodes  Page no.14/65 Qualification/Eli	Page no.45/65 3. PFS Storage System- 160TB (with 2 I/O nodes) A. I/O Nodes  h. Form Factor  Page no.14/65 Qualification/Eli	memory slots to upgrade further by adding memory modules (at least 16 DIMMs)  Page no.44/65 3. GPU Nodes  Process or  Scalable processors (Formerly codenamed Cascadelake) with x86_64 architecture, each having 20-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 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory  Page no.45/65 3. PFS Storage System-160TB (with 2 I/O nodes) A. I/O Nodes  Page no.14/65 Qualification/Eli gibility Criteria  Page no.14/65 Coulification/Eli gibility Criteria  Page no.14/65 The company control of the same size in terms of no. of nodes, or more, with minimum performance of 25TF or higher, with Infiniband/ OPA Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, during last 5 years. Documentary evidence to be	memory slots to upgrade further by adding memory modules (at least 16 DIMMs)  Page no 44/65 3. GPU Nodes  Process or Scalable processors (Formerly codenamed Cascadelake) with x86_64 architecture, each having 20-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 1344 GFLOPs or more (with turbo frequency and hyper-threading feature disabled)  Memory 192 GB DDR4-266 with ECC or higher, in balanced configuration populating all memory channels hemory channels  Page no 45/85 3. PFS Storage System-160TB (with 2 I/O nodes) A. I/O Nodes  Page no.14/65 Qualification/Eli gibility Criteria  Memory adding memory modules (at least 3 to 10 JMs)  We request that this clause be changed to "192 GB DDR4-2933 with ECC or higher, in balanced configuration populating all memory channels to "192 GB DDR4-2933 with ECC or higher in balanced configuration populating all memory channels hemory channels  N. Form Rack-mountable with rail-kit. 1U or lower'  Page no.14/65 Qualification/Eli gibility Criteria  Page no.14/65 Cualification/Eli gibility Criteria  Page no.14/65 (all the control of the control of the same size in terms of no. of nodes, or more, with minimum performance of 25TF or higher, with Infiniband/ OPA Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, unit performance to 25TF or higher, with Infiniband/ OPA/10G Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, unit performance to 25TF or higher, with Infiniband/ OPA/10G Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, unit performance to 25TF or higher, with Infiniband OPA/10G Fabric in India, of which at least 2 installations shall be at Govt. Education & Research Organizations, unit performance to 25TF or higher, with Infiniband OPA/10G Fabric in India, of which at least 2 installations shall be at Govt. Education & Resear

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Kindly Consider Below points as well:	See Above
1.We need to get BeeGFS included	~
alongside Lustre	
2. IO Servers form factor need to be	
relaxed from 1U to 2U	
3. Memory across all nodes need to be	
2933MHz instead of 2666 MHz as	
Casacdelake supports 2933MHz DIMMs.	
Proposing a 2666MHz will render a sub-	
optimal system	The Late

Meeting concluded with thanks to the Chair.

[Mohd Danish Ansari] Nodal Officer (Procurement), TEQIP-III [Shwetank Parihar] Nodal Officer (Finance), TEQIP-III [Vinay Kumar Srivastava]
Coordinator-TEQIP-III

[Mayank Pandey] Member [D. K. Yadav] Member

Approved/Returned for Review

Director

[A. K. Singh] Indenter & Head