INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

PUNE

CLARIFICATION ON TENDER NUMBER - IISER-PUR-1311-16

ITEM DESCRIPTION- PROCUREMENT OF HPC CLUSTER

Refer our Press Tender Notice No.IISER/S&P/18/16 dated 26.12.2016 for procurement of HPC Cluster . Tender Reference Number – IISER-PUR-1311-16.

Pre-Bid meeting was held on December 03rd , 2017 at 3.30 PM and minutes of meeting is as under.

At the outset, the Chairman welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the Project and thereafter requested Assistant Registrar (S&P) to brief the vendors on the salient features of the commercial terms and the indenting Officer to read out the clarification sought by the Prospective Bidders and replied thereto as detailed in Annexure -II

The representatives present were satisfied with the replies given and it was informed that the corrections / additons / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the website of IISER Pune and all the Prospective Bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before submitting their bids as stipulated in the Bidding Documents.

The other terms & conditions of the notice issued on our IISER website www.iiserpune.ac .in will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

Sd/-
Assistant Registrar (S&P)

3.1.2017

IISER PUNE

PRE-BID CONFERENCE FOR PROCUREMENT OF HPC CLUSTER

TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1311-16

DATE : 3.1.17

Sl #	RFP Clause	Clarifications / Changes required	Our Reply
1	**Master node - Sr. No.5 Pg 21/43** VGA - ASPEED AST2400 BMC Onboard	Request you to remove and replace with "Integrated Standard Onboard Video Graphics"	VGA - ASPEED AST2400 BMC Onboard or equivalent
2	**Compute node - Sr. No.2 Pg 21/43** Memory - 4 x 32GB (Total 128GB)	Request to change to 8 x 16GB for better CPU-memory Bandwidth	Changed to: Memory - 8 x16 GB (Total 128GB) in compliance with tender specification
3	**Compute node - Sr. No.6 Pg 22/43** Graphics - ASPEED AST2400 BMC Onboard	Request you to remove and replace with "Integrated Standard Onboard Video Graphics"	VGA - ASPEED AST2400 BMC Onboard or equivalent

4	**Compute node-Sr. No. 10 Pg 22/43** Chassis / Power supply - 2U rackmountable with mounting Rails (4 hot-pluggable server nodes in Single 2U enclosure) 1600W Redundant Power Supplies Titanium Level. Each node should be individually serviceable and the enclosure/rack should have at least N+1 redundant Power supply (platinum rated) and redundant fans	Request to reduce to 1400W Power Supplies. Redundant Power supplies to be removed, since 4 nos of compute nodes will exceed the Power capacity of a single power supply.	No Change
5	**Sr. No.7 Pg 24/43** Other conditions - No on-site assembling / integration is allowed after delivery of the hardware, the entire solution must tested and factory integrated.	Request to remove Factory Integration	Factory integrated implies that all parts of the node/equipment is OEM certified and integrated in the OEM factory.
6	**Sr. No.7 Pg 24/43** Other conditions		No change
a		Request to add Intel MPI and Cluster studio X (in the final bid) – Intel MPI and Lib have shown better performance with GROMACS over open MPI and Lib.	No change
b		Request to add commercial supported Job scheduler and Cluster Manger – Cluster manager are tightly integrated with server embedded management which helps client to remotely manage and deploy each single node. With open source Cluster Manger such integration is not possible.	No change
7	**Pg 26/43** Details regarding the Benchmarks	Would appreciate if Benchmarks are committed along with an undertaking by the vendors instead of a submission	No change

		against the RFP and demonstrate during Acceptance criteria. Necessary Undertaking can be provided.	
8	**Page 26/Chapter** 4	Whether number of nodes can be reduced below 5.	benchmark to be done on maximum 4 nodes. No extrapolation is required.
9	**Page 17, Chapter 3**	Request to reduce the duration of maintenance of spare part from 10 years to 5-6 years	We reduce the duration of maintenance of spare part from 10 years to 6 years
10	**Chapter** 2	Request to increase delivery and installation time from 4 weeks to 6 to 8 weeks	delivery time changed to a maximum of 6 weeks.
11	**Page 22,point 10** Chassis, Power supply: 2U rack mountable with mounting Rails (4 hot-pluggable server nodes in Single 2U enclosure) 1600W Redundant Power Supplies Titanium Level. Each node should be individually serviceable and the enclosure/rack should have at least N+1 redundant Power supply (platinum rated) and redundant fans. If discrete rack mount servers are offered, it should be configured with redundant power supplies and fans.	Can we quote 6U Chassis to accommodate 8 compute nodes where IISER will get density of 2 servers per 1U space and total of 6 nos of 1300Watts Titanium class Power supply in N+1 Redundancy against the ask of 1600Watts Power Supply	Yes, as per stipulated tender specification
12	**Page No 21 & 22, Point number 5 & 6 Respectively** ASPEED AST2400 BMC Onboard	Can we quote equivalent graphics card	VGA - ASPEED AST2400 BMC Onboard or equivalent
13	**Page 26** Benchmarking should be purely on CPU cores and should be done on the same configurations and specs as asked in this tender and with a minimum of 5 nodes.	Are we allowed to use 4 nodes for benchmark and extrapolate for 5 nodes result ?	benchmark to be done on maximum 4 nodes. No extrapolation is required.
14	**Page 26**	As per the "INSTRUCTION" file, we are asked to produce the result for 16	Produce the result for 28 core, 56 core, 84 core and 112 core.

		core, 32 core, 64 core and 128 core. However the proposing node will have 28 cores per node. How do we comply to this requirement.	
15	**Page 26** Use openmpi to have the mpi enviornment and gcc for compilation of gromacs.	Are we allowed to use FFTW3 from Intel's optimized MKL library (or we are supposed to use the open source version of the FFTW3 library)?	Use of commercial version of MKL should not be used. Please use open source version of FFTW3
16	**Page 26** GROMACS version should be 4.5.5. GROMACS should be installed and used in double precision using open source compilers (gcc/openmpi)	Are we allowed to use the latest version of Gromacs ?	No Change
17	Page 21 Minimum 64TB SATA Enterprise with minimum 7200RPM (minimum RAW space 64TB)	request to allow 2 disks & allow 2.5" disks	2.5' disks are allowed
18	**Page 21** 1x PCI-E 3.0 x16, 2x PCI-E 3.0 x8 (Low-profile slots)	Make it 6. 3 PCIe slots for 2U server is very specific.	Minimum 1x PCI-E 3.0 x16, 2x PCI-E 3.0 x8 (Low-profile slots)
19	**Page 21** Appropriate RAID Controller with at least 2GB cache supporting RAID 0, 1, 5 & 6	What about battery back up ?	No change
20	**Page 21** 4 x 32GB (Total 128GB) DDR4-2400 ECC REG.(Max 512GB, 08 DIMMs)	Suggesting 16GB x 8 and scalable to 16 dimms - that's industry standard	Technical specifications modified to Memory - 8 x16 GB (Total 128GB) DDR4-2400 ECC REG.(Max 512GB, 08 DIMMs)
21	**Page 21** 1 x 1000GB SATA Enterprise 7200 RPM 3.5" HDDs (3 x 3.5" Hot-swap SAS2/SATA3 HDD Bays)	Request to allow 2 disks & allow 2.5" disks	2.5' disks are allowed

22	**Page 21** IPMI 2.0 with virtual media over LAN and KVM-over-LAN support onboard	Only support or licence+3 years support also to be provided?	IPMI 2.0 with virtual media over LAN and KVM-over-LAN onboard with 3 year licence and support
23	**Page 21** ASPEED AST2400 BMC Onboard	request to allow Equivalent. ASPEED AST2400 refers to a particular vendor	VGA - ASPEED AST2400 BMC Onboard or equivalent
24	**Page 22** 2U rackmountable with mounting Rails (4 hot-pluggable server nodes in Single 2U enclosure) 1600W Redundant Power Supplies Titanium Level. Each node should be individually serviceable and the enclosure/rack should have at least N+1 redundant Power supply (platinum rated) and redundant fans. If discrete rack mount servers are offered, it should be configured with redundant power supplies and fans.	Request to allow Platinum PS. In case of Discrete node : does it imply 1U rack server is acceptable?	1U rack server is acceptable provided it complies to the technical specifications of the tender
25	**Page 24** The server and all its components should be verified and recommended by the motherboard manufacturer by means of compatibility list.	Request to change to - All components should be from the server OEM to ensure fully compatible system	No change
26	**Page 24** The compute nodes should be dense rack form factor designed for cluster solution and should be in the lowest foot print and the lowest power consumption	As per above, discrete 1U server are allowed ?	1U rack server is acceptable provided it complies to the technical specifications of the tender
27	**Page 24** No on-site assembling / integration is allowed after delivery of the hardware,	Factory integrated implies all parts are from the same OEM and integrated in OEM factory - Is the understanding correct?	Factory integrated implies that all parts of the node/equipment is OEM certified and integrated in the OEM factory.

	the entire solution must tested and factory integrated. Only rack-mounting, installation of OS and applications can be done		
28	**Page 24 & 25** The bidder should also give power, UPS and cooling requirements for the cluster solution along with the proposal. The power and cooling requirements should be calculated at peak usage assuming that all cores in every node are being used. Please provide separate power requirement for cluster and storage.	Request to Remove the word storage as there is no storage in this requirement. It seems to be typo error	The bidder should also give power, UPS and cooling requirements for the cluster solution along with the proposal. The power and cooling requirements should be calculated at peak usage assuming that all cores in every node are being used.
29	**Page 26** Benchmarking should be purely on CPU cores and should be done on the same configurations and specs as asked in this tender and with a minimum of 5 nodes	Please allow processor with higher core count and speed for running benchmark with due interpolaction	No change. "Minimum of 5 nodes should be changed to maximum 4 nodes"

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COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1311-16   DATE : 3.1.17

S.No	Query/Clarification Sought	Clarification / Amendment
	--------------NIL---------------	--------------------NIL---------------------