



## INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

### PUNE

#### CLARIFICATION ON TENDER NUMBER - IISER-PUR-0896-14

#### ITEM DESCRIPTION- PROCUREMENT OF HIGH PERFORMANCE COMPUTER CLUSTER

Refer our Press Tender Notice No.IISER/S&P/11/14 dated 2.1.2015 for procurement of High Performance Computer Cluster. Tender Reference Number - IISER-PUR-0896-14.

Pre-Bid meeting was held on January 12<sup>th</sup>, 2015 at 3.00 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 / additions / 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](http://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

12.1.2015

Sd/-  
Assistant Registrar (S&P)



## IISER PUNE

## PRE-BID CONFERENCE FOR PROCUREMENT OF HIGH PERFORMANCE COMPUTER CLUSTER

## TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-0896-14

DATE : 12.1.15

S.No	Query/Clarification Sought	Clarification / Amendment
1	16-nodes of the offered configuration is a very high configuration for the benchmark to be done and is not available with us or our OEM's . It is requested that the committee considers 5 TF configuration for the benchmark	The number of nodes on which the benchmark has to be done has been now reduced from 16 to 5. The vendors needs to do benchmark on 1,2,3,4 and 5 nodes.
2	It is requested that the CPU of the Haswell family be allowed as a part of the benchmark configuration.	Tender Specifications prevails and the benchmark needs to be run using the specific CPU SKU mentioned in the tender.
3	On page 3 it says "Only those vendors whose benchmark results are within 10% of the best one will be qualified for the commercial bid".	No reference number shall be provided.

	There is no reference point given for the efficiency and scalability for the Quantum Espresso Benchmark. It is requested that IISER provides a reference number.	
4	<p>Running each of the benchmarks (using the same software suite they have used while running the benchmarks for the technical bid) at IISER Pune to demonstrate the performance as claimed in the technical bid.</p> <p><b>Requesting IISER to please define the Software suite</b></p>	The software suite includes the version of Quantum ESPRESSO 5.1 and Intel Parallel Studio XE Cluster edition 2015
5	<p>User List : a) The list of users specifically for the same model/make of the quoted item (not the list of general users) along with the complete name, address &amp; contact numbers of the user organizations/persons may be submitted with the quotation along with the performance certificates from all/some of them. b) If you have supplied identical or similar equipment to other IISERs/IITs /CSIR Labs/Institutes., the details of such supplies for the preceding three years shall be given together with the prices finally paid. Indicate the names of the Indian reputed Organizations where you have supplied similar equipment and may attach the satisfactory performance report of the equipment from user Organization.</p> <p>User List : a) The list of users specifically for the same model/make of the quoted item (not the list of general users) along with the complete name, address &amp; contact numbers of the user organizations/persons may be submitted with the quotation along with the performance certificates from all/some of them. b) If you have supplied identical or similar equipment to other IISERs/IITs /CSIR Labs/Institutes., the details of such supplies for the preceding three years shall be given together with the prices finally paid. Indicate the names of the Indian reputed Organizations where you have supplied similar equipment and may attach the satisfactory performance report of the equipment from user Organization.</p> <p><b>Please allow bidders and its OEM to share the client references along with contact details. Supporting documents such as PO copy and installation report should be acceptable.</b></p>	The terms and conditions mentioned in the tender remain unchanged. However, if a bidder wants to share its OEM's client references they can provide that as additional information.

6	<p>Each node should have dual CPUs with processor clock speed of at least 2.6 GHz, E5-2690V3 (Haswell).</p> <p><b>Does this mean CPU higher then E5-2690v3 is allowed to quote irrespective of clock speed</b></p>	<p>No, the CPU SKU is fixed. The word "at least" stands removed from the tender document.</p>
7	<p>Installation and integration of parallel and serial versions of user specific softwares like Quantum ESPRESSO, Gaussian Linda, ABINIT, SIESTA, GROMACS, GAMESS, CPMD, cp2K, VASP, etc.</p> <p><b>Requesting IISER to define this scope of number application installation. Please ask for max of 3 to 4 application only</b></p>	<p>Mathematica and Matlab should also be installed. Maximum number of applications to be installed will be 15.</p>
8	<p>Benchmark deviation to be changed from 2% to 5%.</p>	<p>No change in tender conditions.</p>
9	<p>Performance comparison to be changed from 10 to 15 %.</p>	<p>No change in tender conditions.</p>
10	<p>A parallel File system (Licensed version of Intel Enterprise edition for Lustre software or IBM General Parallel File system) based High Performance Storage. Solution of minimum 250 TB usable capacity(with hardware RAID6) and should be capable of delivering a write performance of 6 GB/s. The read should not be less than the write. The 250 TB should be partitioned into scratch (100 TB), home (100 TB) and archive (50 TB)</p> <p><b>Please clarify if the performance bifurcation for 250TB of capacity.</b></p>	<p>The performance asked is for the 250 TB.</p>
11	<p>All hard disks must be at least NL-SAS or equivalent or better with speeds equal to or above 7200 rpm. The capacity of each disk should be minimum 3 TB or higher.</p> <p><b>Request you to please allow 2TB HDD.</b></p>	<p>No change in tender conditions.</p>
12	<p>Request IISER let us know if Lustre metadata is to be provided on 10K or 15K RPM disks ? Further, request IISER let us know how much metadata storage you need in case of Lustre PFS ? For example, 2.5TB of Lustre metadata usable space on RAID1+0 layout offers capacity to hold 600 Million files.</p>	<p>2.5 TB of usable Lustre meta data on Raid 1+0 to be provided on 10 K RPM disks.</p>

13	<p>Eligibility Criteria: We request IISER to include below eligibility criteria's in order to make sure only qualified, experienced and proven HPC OEM's and System integrators participate in the Bidding.</p>	<p>The eligibility criteria for bidders remains unchanged.</p>
14	<p>The bidder should have documentary evidence of purchase order for at least one successful installation of distributed memory node cluster, with only CPUs, of at least 30 TF peak performance, in India in a single order within the last 3 years. A certificate of satisfactory performance from such a customer with the name (specific contact person/researcher), email id and phone number of the customer must be provided.</p> <p>Please clarify if the case reference needs to be provided with the same OEM that is being quoted</p>	<p>No.</p>
15	<p>Since IISER has finalised the cpu sku and compiler suite, we request that the application benchmark performance be removed. Hpl can be in the form of commitment as per rfp. The reason is that the specific cpu sku is not available for benchmark. If IISER still wants the benchmark, kindly allow us to run with the available cpus and extrapolate for E5-2690v3.</p>	<p>The bidders have to provide the benchmark and the benchmarks needs to be done on the CPU SKU specified in the tender.</p>
16	<p>ii) running each of the benchmarks (using the same software suite they have used while running the benchmarks for the technical bid) at IISER Pune to demonstrate the performance as claimed in the technical bid.</p> <p>We assume development tools, libraries, MPI and application to be same for software suit. Please confirm.</p>	<p>Yes.</p>
17	<p>(b) If (a) is satisfied, the benchmarks for QE will be considered. Firstly, each of the QE benchmark runs should give correct numerical results up to 4 places after decimal. Request you to provide reference output for result verification.</p>	<p>No reference numbers shall be provided.</p>
18	<p>No fast math options are allowed.</p> <p>Request you to elaborate the same. OR Suggest optimization flags to avoid</p>	<p>Tender conditions remain unchanged.</p>

19	Since institute is looking for 80TF cluster, we suggest HA for master node. Please change the quantity of master node to 2 for the same.	The quantity for the master node remains unchanged. We will convert one of the compute nodes to service/login node.
20	A 1Gbps NIC can not be upgraded to 10Gbps. We understand, the institute is looking at provision to replace 1Gbps with 10Gbps or add 10Gbps Copper/MMF adapter in future. Please confirm	Yes.
21	We understand, the institute is looking at 2x10Gbps adapter with Copper. This will be in addition to the 4 NIC ports mentioned above. Please confirm.	Yes.
22	Master Node:  It should have 1x1 TB SATA disk We suggest to change the specification to 2X1 TB SATA disk for RAID configuration and OS installation.	The specification in the tender has been amended.  It should have 2x1 TB SATA disk for RAID configuration and OS installation.
23	Multiple PFS clients (minimum 16) creating 4KB files in single shared directory demonstrating minimum of 30,000 files created/sec.  Requesting institute to elaborate the requirement	The requirement is that Multiple PFS clients (minimum 16) should create 4KB files in single shared directory demonstrating minimum of 30,000 files created/sec.
24	The solution should be highly available with <b>no single point of failure</b> including I/O servers (if required), Meta data servers, storage array, storage controller, HBA cards and power supplies.  Does this imply 2 disks in Raid 1 for OSS, MDS and Master node. Also whether it implies provisioning Dual port IB HCA in these nodes.	Yes.
25	Storage management solution  Please elaborate the requirement. We can include the storage management software with the disk storage being proposed.	It should be able to monitor and manage PFS and disk arrays.

26	Does IISER need storage benchmark output to be submitted along with tender response? Without actual output, there is no way to determine capability of system to deliver the stated performance. We request you to make the same mandatory.	Yes, it is mandatory.
27	IISER has asked for "full bandwidth Infiniband connectivity between storage subsystem and the cluster". Does that mean incoming linked to I/O server and outgoing links from I/O server should have equal and of same bandwidth ? For example, if each I/O server has 2 Infiniband links to cluster, it must have 2 Infiniband links to storage.	Bandwidth of incoming links to I/O server (If required) on Infiniband should be equal to outgoing bandwidth of links on storage on Infiniband/FC/SAS.
28	Can we quote storage hardware from one OEM and PFS from another or IISER needs both to be from same OEM so that there would be one point of contact for all storage related support call ?	The vendor is free to quote storage hardware from one OEM and PFS from another.
29	Do we need to quote the name and specs for the open source product that we are proposing? We suggest to make the same mandatory for proper technical evaluation	Yes. The vendors have to mandatorily give the complete details for the same.
30	<p>We suggest to include the following points for getting quality bid:</p> <ol style="list-style-type: none"> <li>1. OEM should have direct presence in TOP500.ORG during last 3 years , with minimum 5 entries in latest release of June 2014.</li> <li>2. OEM should have Direct support Infrastructure in India from last min 5 years</li> <li>3. Bidder firm should have an average turnover of at least Rs.100 crores with Positive Net worth in each of last three financial years (i.e. year 2011-12, 2012-13 and 2013-14). Bidder not having the required Turnover and applying against the bid shall be rejected. The Bidder should not bankrupt in last 03 years. Profit &amp; Loss statement and Balance sheet for last 03 years to submitted for bidder.</li> </ol>	No, the eligibility criteria remain unchanged.
31	<p><b>Clause 10.3, penalty for break down, page 22:</b></p> <p>Any complaint pertaining to system breakdown must be addressed within 24 hours of receiving the compliant. Defective parts must be</p>	Yes. The complaint must be addressed within 24

<p>replaced within two days. A penalty of Rs. 10,000 per day shall be levied in case bidder fails to perform the above tasks as per the time lines.</p> <p>As per the clause 13, Warranty/support on page 22 : full performance must be resorted within 48 hours of receiving the complaint, else penalty of Rs, 10,000 per day shall be levied.</p> <p><b>Please confirm if the clause 13 will be applicable as per clause 10.3 (ie defective part must be replaced within 48 hrs, after the 24 hrs of receiving complaint)</b></p>	<p>hours of receiving the complaint. In case of defective parts, the same must be replaced within 48 hours after 24 hours of receiving the complaint.</p>
--	---





## IISER PUNE

## PRE-BID CONFERENCE FOR PROCUREMENT OF HIGH PERFORMANCE COMPUTER CLUSTER

## COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-0896-14

DATE : 12.1.15

S.No	Query/Clarification Sought	Clarification / Amendment
1	Page No-24 clause 18 To change the Payment terms	No Change in Tenders Terms & Conditions
2	Page - 25 Clause 19 - Penalty for delayed Services / LD The LD is capped at 10% of the contract value is covering clause 10.3 and clause 13 on page 22	No change in Tender Terms & Condition
3	Page - 15 , A (ii) Certificate by bidder not doing business in India.	Page - 15 , A (ii) Certificate by bidder not doing business in India amended to Certificate by bidder doing business in India.

4	<p>Limitation of liability</p> <p>Request to include limitations of liability conditions</p>	No Change in Tender Terms & Conditions
5	<p>Clause 22- Dispute Settlement</p> <p>Request to change dispute settlement conditions</p>	No Change in Tender Terms & Conditions
6	<p>Dispute Resolution/Limitation of Liability/Notice/Change Order/Cue Period in Case of Termination for default/IPR Infringement request to change the terms &amp; conditions.</p>	No Change in Tender Terms & Conditions
7	<p>The deliveries &amp; installation must be completed within 4 weeks after opening of Letter of Credit.</p> <p>Request to please relax it to 12 weeks</p>	<p>The following amendment has been done in the tender:</p> <p><b>The delivery and installation has to be successfully completed within 8 weeks after opening of Letter of credit</b></p>
8	<p>Query on Taxes</p> <p>In case of increase in taxes, duties or levies or in case of introduction of any new tax duty or levy by the Government during the contract period, The same shall be paid or reimbursed by purchaser</p>	<p><b>Clarification on Taxes</b></p> <p>In case of increase in taxes, duties or levies or in case of introduction of any new tax duty or levy by the Government during the contract period, The same shall be paid at actual by IISER Pune.</p>