## CENTRE FOR MODELING & SIMULATION UNIVERSITY OF PUNE PUNE-411007

## **Request for Quotation**

Ref No.: CMS/12-13/033 The Director

Date : 31/12/2012 Centre for Modeling and Simulation,

University of Pune,

Ganeshkhind, Pune-411007

Quotations are invited from International original equipment manufacturer(OEM) through one of the system integrators(SI) for the service of following goods/carrying out the work, so as to reach office on or before **11/01/2013**:

Sr. No.	Description of Material/item/work	Quantity
1.	Compute Node: 2 X 2.6 GHz 8 core Sandy Bridge Processor, Memory-64GB, FSB-1600MHz, HDD-500 GB SATA, Infiniband card (QDR), Gigabit control with 2 ports. (Form Factor: Half width)	4*
2.	Infiniband Switch: 18 port QDR switch ,with 3 mtr. 7 cables.	1
3.	<b>Compilers and MPI:</b> IntelR Cluster Studio XE 2013 for Linux OS - 1 User Academic with 3 years Support (ESD).	1
4.	Software:  The proposed HPC cluster system should be deployed with (a) an open-source Linux-based operating system with adequate device driver support; tools for cluster installation and management that support node-group and repository manager for deploying updates, patches, etc., or for quickly re-imaging new nodes with no interruption in uptime; tools for monitoring cluster health,resource usage; and a job scheduler; (b) compilers, MPI, and code development tools; (c) installation/integration of user-specific scientific applications (VASP, Quantum Espresso, Wien2K, Nanolab, SIESTA, OpenMx); (d) integration of all software components so as to make the complete HPC cluster system fully functional and usable (e.g.,integration of the scheduler with MPI, any license managers, etc.).	
	OS support: RHEL/Cent OS.	

**Note:** For terms and Conditions please see overleaf.

<sup>\*</sup> It will be advantageous to bidder if more number of compute nodes (Same configuration as mentioned above) within given budgetary provision, are offered.

#### **TERMS & CONDITION**

**1. Budgetary Provision** : ₹ 14,50,000/-.

**2. Validity of Pricing** : Minimum 120 days from last date of quotation submission date.

Original Equipment Manufacturer of HPC system may take support from one System Integrators.

## 3. OEM's Eligibility:

- 1. Continuous presence on http://www.top500.org/ during 2007-12, with minimum 5 entries in the latest release of November 2012 list.
- 2. Adequate experience during 2007-12 in setting up HPC clusters capable of at least 5 TFlops sustained performance.
- 3. Adequate support infrastructure in India (preferably in the Pune region).
- 4. Adequate representation in India's scientific establishments.

# 4. SI's Eligibility:

- 1. SI must be provided with explicit authorization letters by the OEM.
- 2. SI should have experience of implementing and supporting minimum 3 Linux based HPC cluster systems in scientific establishments in India.
- 3. SI must have a sales and service office in Pune.

### 5. Delivery:

A purchase order will be issued by the University to the vendor selected by the Purchase Committee. We expect **door step delivery** of the HPC cluster system in its entirety within 4/6 weeks after the date of this purchase order.

### 6. Implementation:

We expect implementation of the HPC cluster system to be completed by the OEM/SI within two weeks after delivery. End-goals of implementation are: a) the deployment of the HPC cluster system complete with hardware, OS and clusterware, and user-specified software, and (b) a clear demonstration that the system is fully functional and usable for the end-user for scientific/computational research.

#### 7. Testing and Certification:

The warranty on the HPC cluster system will begin on the date the HPC cluster is demonstrated by the vendor to the CMS's technical team to be fully operational and working satisfactorily. This date will be decided as follows: Upon completion of implementation of the entire cluster system (hardware+software) by the vendor, the CMS technical team will test it for not more than one week at full computational load. If no problems of any kind show up during this test period, the system will be

certified by the CMS's technical team as "fully functional and working satisfactorily". Warranty on the cluster system will begin on the day of this certification.

If any problems show up, they will need to be corrected by the vendor and the CMS technical team will again subject the cluster system through the mandatory testing period. This test cycle will be repeated as many times as required until the cluster system is demonstrated to be fully functional to the CMS technical team's satisfaction.

### 8. Performance Bank Guarantee (PBG):

The successful vendor will be required to furnish the Performance Guarantee towards the item supplied, in the form of a Bank Guarantee for the 10% amount of the Purchase Order value, as per the format (Available in CMS office). This bank guarantee should be submitted along with the invoice on successful installation. The Bank Guarantee shall remain valid for the period of 36 months from the date of installation. The PBG can be submitted in INR or in any foreign currency. However, the PBG must be negotiable at a branch of issuing bank in India. The PBG from Indian distributor / representative is acceptable. In case of no warranty claims towards the item under warranty, the PBG will be returned on completion of warranty period.

### 9. Pricing:

- 1. Pricing for each major HPC cluster system component (compute nodes, infiniband switch, software and implementation).
- 2. Per-node pricing of the offered compute node.

**All prices are to be quoted in USD**: University of Pune is exempted from octroi duties levied by the Pune Municipal Corporation and Customs duties. The CMS's office will provide an octroi and Custom exemption certificates, if and when necessary. **Any other applicable taxes should be mentioned clearly.** 

#### 10. Payment:

#### **For USD components:**

100% LC will be open for USD components. 90% payment will be made after dispatch documentary evidence and 10% amount will be cleared after satisfactorily installation (see clause 7) and submission of Performance Bank Guaranty (10% of PO value) (see clause 8) of Nationalize bank, covering complete warranty period.

## For INR Components:

Upon certification of the fully-implemented HPC cluster system by the CMS's technical team as "fully-operational and working satisfactorily" (see clause 7), University of Pune will make INR payment within 4 weeks by a mutually agreeable method.

#### 11. Warranty and Support:

1. **Warranty.** Your proposal must provide, in the least, (a) 3-year onsite comprehensive warranty with next-business-day response/support for all hardware. (b) 3-year onsite next-business-day

- support for everything related to the operating system, clusterware and software setup.
- 2. **Single-Point-of-Contact Support**. Irrespective of who represents the OEM, we need one single point of contact with the vendor for all and post-implementation/warranty support

**Note:** University of Pune reserves the right to disqualify any or all quotations without giving any reason. University of Pune is not bound to necessarily accept the lowest price quotation.

### Director,

Centre for Modeling and Simulation University of Pune Pune