

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & B, RAJA S.C. MULLICK ROAD
JADAVPUR, KOLKATA-700032

Tender Notice No.RCAMOS/AP/DST-FST/12/A-08 dated 10.12.2012

Sealed tender in two bids system (Technical Bid) & Price Bid is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for a COMPUTER server system.

Part-I (Technical Bid) of the tender should contain technical details and commercial terms and conditions and Part-II (Price Bid) should indicate group-wise price where applicable as mentioned in the Technical Bid. The Technical Bid and Price bid are to be submitted in two separately sealed envelopes distinctly marked accordingly and both to be put inside another envelope, which should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letter heads.

Complete tender bids should be reach the office of RCAMOS (Raman Centre for Atomic, Molecular & Optical Sciences), Indian Association for the Cultivation of Science, 2A & B, Raja S. C. Mullick Road, Jadavpur, Kolkata-700032

Tender Notice No.	RCAMOS/AP/DST-FST/12/A-08 dated 10.12.2012
Last date and time of submitting tender	February 11, 2013 at 2.00 p.m.
Pre-bid meeting to discuss technical specifications	December 28, 2012 at 3.00 p.m.
Date and time of opening technical bids	February 11, 2013 at 3.00 p.m.
Date of declaration of technically qualified bidders	February 19, 2013 at 5:00 pm
Date and time of opening of price bids	February 21, 2013 at 3.00 p.m.
Place of Pre-bid meeting/opening or tender	I.A.C.S., Kolkata
Contact	Email: rcap@iacs.res.in Tel: 033-2473-4971 (ext: 1779)

The technical bids will be opened first to evaluate technical specifications of the equipment and thereafter the price bids of only technically qualified tenderers will be opened.

1. TECHNICAL BID:

The Technical Bid should contain technical specifications and kept in a separate envelope duly super scribed as "Technical Bid" on the outer side of the envelope as detailed above.

Hardware part

The Technical Specifications acceptable for the x86_64 server system 4 individual nodes **along with a master node**:

Each **Compute** Node would have the following specifications:

- 1) 2 Eight-core AMD Opteron 6328 processor 3.2 GHz
- 2) Should come in a rackmountable form.(0.5U form factor to **2U** form factor max)
- 3) 32GB DDR3 1600MHz ECC SDRAM (2GB per core; must be expandable to 4GB per core i.e. at least expandable to **96 GB/node**)
- 4) **1 TB** of 7.2 K RPM SATA **Enterprise class** HARD DRIVE (Provisions for adding at least 2 more such hard drives should be there) **64 MB** cache and **6 GB/s. QDR infiniband capable** so it must have a **QDR infiniband network card**
- 5) **Basic Video card, USB ports, LAN ports, VGA ports, Infiniband Controller, IPMI 2.0**
- 6) Redundant Platinum Plus Power Supply
- 7) Installation of a Server compatible free Linux operating system, CENTOS 6.0 or above
- 8) 3-year warranty and on-site service on all parts
- 9) Please Note:
- 11) All bidders will have to temporarily provide runtime statistics of GAMESS-US input provided by the indenter's group after properly installing GAMESS-US on a model server with 2 AMD 6328 3.2 GHz processors with at least 1 TB of SATA hard drive and 32 GB (or more) RAM. The run time statistics would help the technical committee to technically evaluate the machine which the bidder is offering to deliver. Failure to provide such statistics by any bidder would automatically disqualify that bidder. The time for testing and the actual procedure would occur between the time window which would be available from Pre-Bid meeting to the time of final declaration of technically qualified bidders. Furthermore, after installation the same run time performance should be delivered by that supplied machines. Please contact Dr. Ankan Paul (rcap@iacs.res.in) if you have any issues regarding this requirement. The main idea is to test if the AMD

6300 series processors are competent to run quantum chemistry codes efficiently

Mother node with the following specifications

- 1) 2 Eight-core AMD Opteron 6328 processor 3.2 GHz
- 2) Should come in a rackmountable form.(0.5U form factor to 2U form factor max)
- 3) 32GB DDR3 1600MHz ECC SDRAM (2GB per core; must be expandable to 4GB per core i.e. at least expandable to 96 GB/node)
- 4) 6 x 1 TB of 7.2K RPM SATA Enterprise class HARD DRIVE 64 MB cache and 6 GB/s (RAID 6)
- 4) QDR infiniband capable so it must have a QDR infiniband network card
- 5) Adequate no. of Graphics cards, DVD-RW Drive (external or internal), USB ports, LAN ports, VGA ports, Infiniband Controller
- 6) Redundant Platinum Plus Power Supply
- 7) Installation of a Server compatible free Linux operating system, CENTOS 6.0 or above
- 8) 3-year warranty and on-site service on all parts

For setting up QDR infiniband network and other networking requirements

- a) A QDR 18-port infiniband switch
- b) Adequate number of QDR infiniband cables

And

24 port gigabit network switch

Software requirements

- a) setting up a computer cluster with the aforementioned mother node and compute nodes with QDR infiniband network
- b) setting up a PBS job server using a free queuing software like Toqru or other similar alternatives
- c) installation of latest versions of MPI and OPENMPI on the cluster for parallel execution of programs and other open source fortran and c compilers

2. PRICE BID

The financial bid indicating item-wise price for the items mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as "PRICE BID" on the outer cover of the envelope as already detailed above. The price bid of only technically qualified bidders will be opened and they will be intimated the date and time of opening at their email id-s. Rest of the bids will stand rejected.

PRICE: Price to be quoted both on FOB/CIF basis. Name of the particular Port from where our authorized forwarder may lift the consignment must be mentioned clearly with FOB price. The price comparison would be done on a CIF basis. **The bidder with L1 price would be informed if the order would be placed on CIF or FOB basis and formalities and delivery and pick up arrangements regarding this would be discussed during the placement of order with the L1 bidder.**

Additional price estimates should also be included for adding 4 GB or 8GB 1600MHz DDR3 RAM modules or additional hard drives to the compute nodes. **Please note that must not be included in the FOB or CIF price and should come as a separate piece of information. Also the bidders have to furnish information about the UPS and battery back up of the cluster. Please note the UPS and associated batteries would be bought separately and it is not part of this particular tender notice.**

BID SECURITY:

1. An Account Payee Demand Draft/ Pay Order for Rs. 32,000/-(Rupees Thirty Two Thousand only) drawn in favor of "**Indian Association for the Cultivation of Science**" is to be furnished along with Technical Bid as Bid Security money (or EMD). Bidders registered with the Central Purchase Organizations, National Small Industries Corporation etc. may be exempted from paying EMD subject to their submission of a copy of valid registration certificate with their Technical Bids, failing which their bids will be rejected.
2. The Demand Draft/ Pay Order for the Bid-Security money should have at least 45 (forty five) days validity period after opening of the Bids.
3. The Bid Security of unsuccessful bidders will be returned.

PERFORMANCE SECURITY:

1. The successful bidder should deposit 10% of the tendered value as "**Performance Security**", by way of an account payee demand draft drawn in favor of "**Indian Association for the Cultivation of Science**".

2. Performance Security should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.
3. Bid Security (EMD) would be refunded to the successful bidder on receipt of the Performance Security.

GENERAL INSTRUCTIONS:

1. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.
2. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response for a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the Institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in/tender) for any amendment.
3. **Payment:** 100% against delivery and successful installation subject to submission of performance guarantee.
4. **Warranty:** 3 years and on-site service on all parts.
5. **Installation/Commissioning/Demonstration/Application Training at site:** Free of cost by the supplier. The vendors are required to give an estimate of the time required for installation, fine-tuning of the cluster and hand-holding/training of the principal users in the technical bid. The vendor shall be responsible for setting up of the Linux nodes using CENTOS. It will be highly desirable if the vendor has proven capability to install some commonly used quantum chemistry programs like GAUSSIAN09, GAMESS-US, POLYRATE, NWCHEM, QCHEM and MOLPRO (PARALLEL INSTALLATION).
Training: Free basic hand holding training on operation and troubleshooting for a week of the whole HPCC Solution should be imparted to at least 2 persons at the site of installation.
6. **Service facility:** Suppliers should mention their details of service setup and Manpower in Kolkata who are responsible for after sales support. Response time should be within 24 hours.

7. **Validity of tender:** Tender submitted shall remain valid at least for three months from the date of opening the tender. Validity beyond three months from the date of opening the tender shall be by mutual consent.
8. **Vendor Eligibility:** The bids must be submitted by OEMs or OEM supported single vendors only with original authorization certificates from the OEMs. Vendors should have proven experience in setting up a HPCC of minimum 1 TFLOPS in the last three years in India. A brief proof for such experience (copies of orders/installation certificate) should be included in the technical bid. **The technical committee's decision regarding vendor eligibility would be considered final.**
9. The tender should accompany a compliance chart.
10. The rate should be inclusive of all taxes, transportation etc. Nothing extra will be paid in addition to the quoted rate.
11. The model number, make, and a printed literature of the product shall be submitted positively.
12. Proposed delivery schedule should be mentioned clearly.
13. Manufacturers exclusive distributors/vendors should have history of supplying this type of instrument to this or other Scientific Organizations.
14. Authorized Dealership Certificate is must in case of principal manufacturing company is not quoting directly.
15. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
16. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of technical bids will be the following working day at the appointed time.
17. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
18. For any clarification regarding technical specifications, etc. please send your queries to Dr. Ankan Paul (rcap@iacs.res.in).

19. The Institute reserves the right to reject any or all of the tenders received without assigning any reason thereof.

IMPORTANT INFORMATION

1. Decision of the technical committee is final and incontrovertible regarding the qualification of technical bids.

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