

Request for Proposal for High End Compute Cluster

Proposals are invited, in two-cover format, from bidders for high-end Compute Cluster with the following specifications.

Technical Specifications:

A HPC Cluster with 1 Head node and **at least** 8 rackmountable compute nodes (**to give a sustained HPL performance of 20 TF**), with a High Performance interconnect with the following specification. Compute Nodes and Head Node

- 2 Intel Xeon Gold/Platinum Cascade Lake Processors each with 24 Cores or more at 2.2 GHz or higher **(or)**
2 AMD EPYC 74xx or 75xx Processors each with 24 Cores or more at 2 GHz or higher
- DDR4 ECC memory of appropriate size with 4 GB per core and in fully-balanced Configuration operating at 2933 MHz or higher
- 2 X 1 TB SATA HDD
- At least 8 PCI-E 3.0 x16 (double-width) slots, 2 PCI-E 3.0 x8 (in x16) slots
- Dual port Gigabit Ethernet onboard.
- Redundant Power Supplies (Gold/Platinum)
- Optional: DDR4 memory 8 GB per core (in fully balanced configuration) in lieu of 4 GB per core
- 100 Gbps HCA Interconnect

100Gbps interconnect switch to connect the head nodes, compute nodes with appropriate number of ports and cables.

Software: Cent-OS and open-source compilers and tools, open source mathematical/scientific libraries

Instructions to the Bidders:

The quotation should comprise of **Two-cover format – a Technical part and a Commercial part.**

Technical Bid

The technical bid should contain the following.

- Unpriced bill of material with quantities of each line item.
- Datasheet for product/model suggested.
- The technical bid should not contain any price information. Non-conformance will result in disqualification.

Commercial Bid

- The Commercial bid should contain details of the prices for each one of the subsystems of the total offer giving clearly the rate and the quantity. Bundling of the prices is not acceptable.
- Optional items must be quoted as a separate line item.
- Installation and Commissioning charges, if any, must be quoted as a separate line item.
- Bidders proposing multiple options must quote for each of the configurations separately including the necessary data-centre requirement as self-contained bids and this is a mandatory requirement.

Covers containing the technical and commercial bids must be individually sealed, and superscribed respectively as **“Physics/akuley/2019 – Technical Bid”** and **“Physics/akuley/2019/ – Commercial Bid”**. The two covers must be put in a larger enveloped, sealed, superscribed as **“Compute Server (CS) - Physics/akuley/2019 ”** and sent to/submitted in **Department of Physics Office, IISc**, Bangalore 560 012, on or before the deadline. All the covers should bear the name and address of the bidder. Non-conformance of any of the above can result in disqualification.

Additional Guidelines:

1. The total solution as per the agreed bill of materials has to be supplied within 4 weeks after receiving a firm PO from IISc and the installation to be complete within a week after supply of the equipment.
2. IISc is eligible for customs and excise duty exemption under notification 10/97-ce. Hence please quote the ED component, if any, separately so as to avail exemption on issue of certificate by us. Bidders planning to quote any imported solution have to give the offer in the respective currency.
3. The offer has to clearly explicitly state the supply part, F & I, I & C, Warranty services and any other charges separately.
4. A copy of the masked Commercial bid has to be given in the technical offer.
5. Delayed and/or incomplete tenders are liable to rejection.
6. The Technical Bid and the Commercial Bid should be duly signed by the authorized representative of the bidder.
7. The Technical Bid and the Commercial Bid should be bound separately as complete volumes.
8. No prices information should be mentioned in the Technical Bid.
9. The Director, IISc, Bangalore-12 reserves the right to modify the technical specifications or the required quantity at any time.
10. The Director, IISc reserves the right to accept or reject any proposal, in full or in part, without assigning any reason.
11. The bidders are requested to go through the Terms and Conditions detailed in this document, before filling out the tender. Agreeing to the terms and conditions of the tender

document (by signing all pages of the copy of a tender document) is a mandatory requirement.

12. A tender, not complying with any of the above conditions is liable to rejection. Incomplete proposals are liable to be rejected.

Commercial Terms and Conditions

- The commercial bid should contain among other things, payment terms, warranty, installation and commissioning charges. These charges will be paid only after successful supply, installation and acceptance.
- Prices may be quoted in US Dollars, IISc is eligible for custom duty exemption/ concession.
- Vendor must quote the prices for shipment on 'CIF' terms.
- Withholding tax, if applicable, will be deducted from the Sight Draft/ Letter of Credit
- In case of imports, the commercial bid should contain among other things the name and address of the Indian agent, if any. Agency commission, if any, will be paid separately in Indian Rupees only.
- In respect of imported solution, IISc will arrange for customs clearance, at Bangalore airport, which will be final destination airport. Hence costs related to customs/clearance need not be included in the offer.
- In CIF offers of imported solutions, insurance should be on "Warehouse to Warehouse" basis and should not terminate at Bangalore airport.
- In case of rupee offer, the component of GST/VAT/CST, E.D. and any other statutory levies if applicable should be shown separately and not included in the total amount, to enable us to avail exemption. IISc is eligible for 5% GST under concessional certificate.
- Price should be quoted per unit and the total amount for the required quantity.
- Offer should be valid for 60 days from the date of submission.
- IISc will place the purchase order only on the successful bidder.

Evaluation of Bids:

1. The technical bids will be evaluated first. Technical bids not meeting the tender requirements will be disqualified.
2. The commercial bids of technically qualified bidders will be opened subsequently. The date and time of opening of the commercial bids will be intimated to the technically qualified bidders.
3. The lowest bid will be identified as the successful bid. In computing the commercial offer, the cost of the servers, software, Installation and Commissioning charges, if any, agency charges, if any, and warranty charges for 3 years will be included. Pricing of optional items will not be considered in the cost.

Payment Terms:

4. The conditions regarding payment terms are as follows:

5. The total project cost will consists of two parts:
 - Equipment supply part (Supply)
 - Installation, commissioning, warranty and maintenance services part (shortly referred as services), if applicable.
6. The total cost of the system (Supply part) will be paid through SIGHT DRAFT/NEFT on delivery.
7. Installation charges, if any, payable only in Indian Rupees, will be paid after acceptance of the system.

The procedure is as follows: On delivery complete inventory checks mandates confirmation of systems to have been delivered with the ordered configuration. Post this system will be installed with CentOS/ Fedora latest version OS or any other open source linux that is provided, and subjected to 48 hours of burn-in test. The burn-in test includes running of hardware diagnostics on all components continuously for a period of 48 hours to eliminate possibility of any hardware failures. The successful completion of the acceptance test results in payment.

Warranty terms

- Warranty services for the system supplied by the successful bidder should be valid for a period of 3 years from the date of acceptance of the equipment.
- During the warranty period, the bidder shall be fully responsible for the manufacturer's warranty in respect of proper design, quality and workmanship of all the systems supplied.
- During the warranty period, the bidder shall attend to all the hardware problems on site and shall replace the defective parts at no extra cost to the purchaser.
- During the warranty period, the preventive maintenance and repairs of the components supplied by the bidder are the responsibilities of the bidder.

Important Dates (Tentative):

November 13, 2019: Enquiry letter sent to Vendors/ Put it on IISc webpage

November 20, 2019 : Clarifications/queries, if any, to be sent by email to akuley@iisc.ac.in

November 22, 2019: Prebid Clarification Meeting. **4:00PM at New Physical Science Office**

December 6, 2019: Last date for submission.