

Domestic tender notification for the procurement of CPU-based compute nodes to be added to existing High-Performance Computing (HPC) cluster.

Tender no.: AE/210/001

Date: 3rd April 2024

Deadline for tender submission: 5:00pm, 29th April 2024

Dear Sir/Madam,

We plan to purchase 5 CPU-based compute nodes, with the following specifications, to add to the existing HPC cluster (refer to Annexure 1 for eligibility criteria).

Minimum specifications for each compute node:

1. 2 x AMD EPYC 7763 (64 cores, 128 threads per processor)
2. DDR4 3200MHz ECC RAM in balanced mode with minimum of 512GB (4 GB per core) and scope for further expansion
3. 1TB SATA SSD on-node storage for OS
4. At least 700W Redundant 80Plus Platinum (94%) PSU or higher
5. 2U form-factor solutions
6. InfiniBand adaptor with a minimum communication speed of 100 Gb/s that is backward compatible with Mellanox 56 Gb/s FDR InfiniBand switches
7. Compatible InfiniBand cable with a minimum length of 2 metres

Software installation

1. All required software must be installed for efficient functioning of the compute nodes in integration with the existing cluster, including (but not limited to): OS installation, Cluster management software, Cluster monitoring tools, Job scheduler, Infiniband network interface, GNU & Intel compilers of C/C++/Fortran, Python Installer and Libraries, Intel OneAPI HPC toolkit with MKL & MPI libraries, and other opensource libraries.
2. In-house C++ code provided by Dr. Rishita Das should be compiled and run across all compute nodes.

Miscellaneous

1. All required cables and power cords compatible with rack mount PDUs with IEC C13/C14 connectors, required for the installation should be provided by the vendor.

Warranty

1. A minimum of 3-year warranty on all components including compute nodes and accessories needs to be provided by the vendor.
2. A "Performance Bank Guarantee" of 5% of the total purchase order (PO) value, valid for the duration of warranty, must be submitted by the vendor before the PO is raised.

The L1 vendor is responsible for physical integration of the nodes onto the rack, including connecting all power cords and InfiniBand cables to the switch, and for installation of all necessary software to guarantee efficient functioning of the compute nodes as part of the existing cluster.

Since the compute nodes must be integrated with the existing cluster, the current facility will be open for viewing to the vendors during 15/04/2024 to 19/04/2024 by appointment (see contact details below) so that the tender can be prepared for appropriate configuration of compute nodes compatible within the existing facility.

For appointment, please contact at rishitadas@iisc.ac.in or 080 2293-3017.

Terms and conditions

1. Two-bid system (separate technical and financial bids) in sealed tenders.
2. The technical bid must clearly specify the prescribed technical specifications without including the prices. Please provide in detail the specifications under each subhead and bullet point. Unique characteristics may be highlighted.
3. Proof of 3 recent installations of similar clusters in autonomous bodies in India, like IITs, IISER, and IISc etc.
4. Vendors who include price information in the technical bids will be automatically disqualified.
5. Price bids of only technically qualified vendors will be considered.
6. The price must be quoted in INR (Indian Rupee) + GST. Quotes should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorised distributor. The quotations should be on FOR-IISc Bangalore basis in INR only.
7. The price should be on FOR-IISc Bangalore basis in INR only.
8. IISc also reserves the right to cancel the tender at any time without assigning any reason whatsoever.
9. Indicate delivery period.
10. Order will be placed on lowest bid from technically qualified vendor.
11. The bidder will assume total responsibility for the fault-free operation of equipment and application software.
12. The tender documents can be sent at the following address:

The Chairman
Department of Aerospace Engineering
Indian Institute of Science, Bangalore 560012
Karnataka (INDIA)
Attn: Dr. Rishita Das

Last date for tender submission: **5:00pm, 29th April 2024**

Annexure 1: Eligibility Criteria

Prequalification criteria:

1. The Bidder should belong to either class 1 or class 2 supplier distinguished by their “local Content” as per the order of the Ministry of Commerce and Industry (vide order no P45021/2/2017-PP(BEII) dated 16th September 2020). The bidder should provide documents certifying their vendor class. Without this certificate the bid will be rejected.

- a) Class 1 supplier: Goods and services should have local content of equal to or more than 50%.
- b) Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
2. Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to Class-1 suppliers.
3. MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details.
4. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organisation in India or elsewhere.
5. Original Invoice, Original Warranty Certificate, Original Test Reports should be produced for all imported items from OEM (Original Equipment Manufacturer) at the time of supply of the equipment.
6. Details of experienced service engineers including contact details should be provided in tender documents.
7. Bidder shall have to submit audited accounts (Balance sheet profit and loss account) of financial year 2020-21, 2021-22 and 2022-23. Audited statement must be signed and stamped by a qualified chartered accountant.
8. Bidders must submit Income Tax returns for assessment year – 2020-21, 2021-22 and 2022-23 certified by a qualified chartered accountant.
9. Bidders must submit up to date sales tax or GST clearance certificate.
10. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.