



**Indian Institute of Science (IISc)**  
**Bangalore - 560012**

Supercomputer Education and Research Centre (SERC)  
IISc

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Notice Inviting Tender (NIT) under  
Two-Cover Bid System

for

**Supply and Installation of Servers for Data Analysis, Pre and Post  
Processing, and Visualization  
[Local Tender]**

**Enquiry or Tender No: [SERC/Purchase/VIS\\_SERVER/2023/1](#)  
Date: [May 9, 2023](#)**

Chair

Supercomputer and Education Research Centre (SERC)  
Indian Institute of Science (IISc)  
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## 1. Preamble

The Supercomputer Education and Research Centre (SERC) in Indian Institute of Science (IISc) is a leading supercomputing centre in the country, possessing state-of-the art computing facilities, catering to the ever-increasing demands of high performance computing for scientific and engineering research. The supercomputer systems in SERC are used for large-scale simulations in various scientific domains.

It is planned to procure **two servers** with adequate RAM and GPU cards for pre-processing input data for the simulations, post-processing the output from the simulations and viewing the simulations using graphical tools. The purpose of these servers is to process large datasets required as input or data that gets generated as output from numerical simulations through job executions on the supercomputing systems in SERC, which are connected to these high-end servers for access to the peta-byte storage on the supercomputer systems. The servers need to have direct access to the large datasets and also have necessary multi-cores and large RAM for quick and efficient data processing. These servers also should support hardware graphics capability for visualization on the data. Typically, these servers can be accessed by multiple users executing limited parallel executions exclusively for data pre and post processing requirements.

## 2. Technical Details

### 2.1 Hardware Configuration

The intended purchase is for **two high-end servers** for data analysis/ pre and post processing/ visualization. Following are the **requirements for each of the servers**.

- Desktop-based server system with Dual Power Supply. Please check this. Should we specify this?
- **Processors Make and Speed:** Latest Intel Xeon / AMD EPYC Processors with at least 2.5 GHz.
- **Number of sockets and cores:** Dual socket configuration, Minimum 48 cores for the entire server across all the sockets.
- **Memory:** Minimum 1 TB DDR4 RAM (ECC RDIMM, minimum 3200 MHz).
- **Storage:** 2X2 TB SATA Enterprise 3.5'' 7.2K RPM.
- The server should be able to support SSDs.
- **Graphics card:** Graphics card that should support 3D graphics with OpenGL hardware support and minimum 32 GB device memory.
- **Network:** 2 X 1GigE NIC ports, 1 X 10GigE optical NIC Interface
- **Power supply:** At least Platinum certified redundant power supply units.
- **Operating System:** Should be certified to run opensource CentOS Linux latest version with OpenGL support.
- **USB Ports:** Minimum two USB ports.

**Monitors, Keyboards and Mouse:** A total of **two** 29'' **monitors** – non touch flat IPS 2560 x 1080, **two** USB **keyboards** and **two** USB **mouse** are required.

## 2.2 Software Installation

The successful bidder is required to install the following software related to data analysis, pre and post processing, and visualization.

- Compilers:
  - Intel compiler (license will be provided by IISc): intel/oneapi/compiler/latest -2022.0.0
  - NVHPC
  - PGI compilers as part of NVHPC: nvhpc/nvhpc-byo-compiler/21.9, nvhpc/nvhpc-nompi/21.9, nvhpc/nvhpc/21.9
- Netcdf
- HDF5
- Python with scipy, ipython, matplotlib, numpy modules
- Paraview, both CPU and GPU versions.

## 2.3 Warranty

The servers should have warranty for a period of 3 years from the date of installation of the equipment. The quotes prices must be inclusive of the warranty costs. During the warranty period, the bidder shall attend to any problems related to malfunctioning of the supplied servers and shall replace the defective components at no extra cost to the purchaser. During the warranty period, the bidder shall attend to all failures relating to basic hardware and software installation, configuration, management, and performance. Periodic maintenance wrt the fundamental software upgrades, updates, and patches, are the responsibilities of the bidder.

## 2.4 Buyback of Existing Visualization Servers (2 Nos.)

The bidder must quote for the buyback of the existing 2 Nos. visualization servers of the following specifications.

- Dell Precision Tower 7910 (2 Nos.).
- Year of Purchase: 2015
- Each server has the following configuration.
- Dual Intel Xeon processor E5-2630 v3 (16 core, 20MB Cache)
- 2.4 GHz Clock Speed Turbo
- Two 500GB SATA Hard Drives

- 256 GB RAM
- NVIDIA Quadro K2200 graphics card (display support)

### 3. Acceptance Criteria

1. The systems should be installed, commissioned and demonstrated for the components and parameters specified in the bid and P.O by the successful bidder, for the solution to be accepted.
2. Successful installation of the basic software and the software listed in Section 2.2 is necessary for the solution to be accepted.
3. It is to be noted that maximum of two weeks will be available (after Installation & Commissioning) to the bidder to conform to this acceptance test criterion set out.
4. Any delay in commissioning or conformance to the acceptance beyond the stipulated time will result in extending the warranty: Each day of delay would result in 3 additional days of warranty.
5. This penalty clause is only applicable for solutions which are considered as technically meeting the requirements, as evaluated by the technical committee. The clause cannot therefore be used as an argument to qualify any solution, which the technical committee considers as not meeting the requirements.

### 4. Technical Details / BoQ Compliance Sheet (to be submitted with Technical Bid)

**Note: DO NOT MENTION THE PRICES IN THIS BoQ COMPLIANCE SHEET. THIS WILL LEAD TO AUTOMATIC DISQUALIFICATION OF THE BIDS.**

SNo	Item Description	Quantity	[Only answer YES/NO in this column. DO NOT MENTION THE PRICE]
1	Servers with detailed specifications, including 3-year warranty	2	
2	Monitor, keyboard, mouse	2	
3	Software installation cost, if any	NA	
4	(-ve) Cost of Buyback of existing visualization servers	2	

### 5. Bidder's Eligibility Criteria

1. Should have supplied and installed similar (at least five) items to any govt. institution/organization in India in the last one year
2. The bidder must have a proven record of maintaining and managing the similar items.
3. Bidders should include necessary document for establishing this with necessary proof in terms POS and customer contact details
4. Should produce authorization from the OEM, if the solution involves an OEM different from the bidder.
5. The bidder must comply with the provisions of Office Memorandum F/No/6/18/2019-PPD dated 23rd July 2020, issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, GoI.

6. The solution offered must comply with the provisions of Public Procurement (Preference to Make in India) Order No P-45021/2/2017-PP (BE-II) dated 15<sup>th</sup> June 2017 (PPP MII Order) and further revised vide Order dated 28<sup>th</sup> May 2018, 29<sup>th</sup> May 2019, 04<sup>th</sup> June 2020 and 16<sup>th</sup> September 2020 issued by Public Procurement Section, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI. The minimum local content, the margin of purchase preference and the procedure for preference to Make in India for this tender are as per the mentioned Public Procurement (Preference to Make in India) Order.

## 6. General Terms and Conditions

1. Offer must be submitted under TWO-BID system i.e., “Technical bid” and “Price (Financial) bid” as hard copies in two separate sealed envelopes within the stipulated period to the indicated mailing address. For soft copy submission, only the technical bid must be sent by email to [tender.serc@iisc.ac.in](mailto:tender.serc@iisc.ac.in).
2. Delayed and/or incomplete tenders are liable to rejection.
3. The Technical Bid and the Commercial Bid should be duly signed by the authorized representative of the bidder.
4. 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.
5. A tender, not complying with any of the above conditions is liable to rejection.
6. IISc reserves the right to cancel the tender at any time without assigning any reason whatsoever.

## 7. Organization of the Technical Bid

The technical bid should strictly be organized in the following sequence only.

**Note:** IISc reserves the right to disqualify any bid that does not provide all the required data and not following the organization given below.

1. A cover letter from the bidder. Among other things, the cover letter should certify that all the requirements of the tender are provided, and the offered solutions meet and comply with the technical and other specifications of the tender.
2. Technical details/BoQ compliance sheet as in Section 4.
3. A copy of the masked Commercial bid has to be given in the technical offer (unpriced Bill of Material (BoM)).
4. The copy of registration certificate or a declaration in compliance with the provisions stipulated in office memorandum F/No/6/18/2019-PPD dated 23 July 2020 issued by Public Procurement Division, Dept. of Expenditure, Ministry of Finance, GoI.
5. Certificates from bidder, as per format given in **Annexure A**, declaring the country of OEM, country of manufacture, location of local value addition and percentage of local contents for various items provided in the bid, and compliance with the provisions of Public Procurement (Preference to Make in India) order No. P-45021/2/2017-PP (BE-II) dated 15<sup>th</sup> June 2017 (PPP MII Order) and further revised vide Order dated 28<sup>th</sup> May 2018, 29<sup>th</sup> May 2019, 04<sup>th</sup> June 2020 and 16<sup>th</sup> September 2020 issued by Public Procurement Section, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI.
6. The bidder must not be blacklisted by any Central / State Govt. Organizations of India as on date of submission of the bids. A certificate or undertaking to this effect must be submitted.
7. Proofs for bidder’s eligibility criteria as given in Section 5.
8. Technical details of the items required in the tender.
9. Terms and conditions of the offer.
10. A certificate agreeing to all the terms and conditions mentioned in the tender.
11. Appendix
  - a. Supporting technical materials including brochures.
  - b. Any other information or documents that the bidder/OEMs deem necessary.

## 8. Technical Bid – Terms and Conditions

1. The technical bid should contain all the information and should have the organization as given in the previous section. Bids without the specific information and organization as in the previous section will be automatically disqualified.
2. No price information must be mentioned in the technical bid. Vendors who include price information in the technical bids will be automatically disqualified.
3. Technical bids will be opened first. IISc may seek clarifications after opening of technical bids.

## 9. Commercial Bid – Terms and Conditions

1. Price bids of only technically qualified vendors will be considered. Commercial bid shall be opened for the technically qualified bidders after the technical evaluation.
2. The hardcopy commercial bid of the successful bidder, after the commercial bid opening stage, should contain among other things, unit prices, payment terms, warranty, installation, commissioning etc. as per requirements of IISc mentioned in the tender document. All such conditions must be in line with the tender. In case of any deviation or conditional offer, the bid may be treated as non-responsive and not be considered for evaluation. The Commercial bid should contain details of the prices for each one of the subsystems of the total offer clearly giving the rate and the quantity. Bundling of the prices is not acceptable.
3. The commercial bid should contain two BoQs, Part A for the purchase items and Part B for the buyback item. L1 would be determined based on Net Price arrived by deducting Part B price from Part A price.
4. This is a **local tender**. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. Prices should be quoted only in INR (Indian Rupees) and will be with GST only. The order must be on FOR basis. No Custom Duty Exemption Certificate will be provided.
5. The component of tax, and any other statutory levies should be shown separately and not included in the total amount, to enable IISc to avail any exemption.
6. Proposals should contain the name and contact details, viz., phone, fax, and email of the designated person to whom all future communication will be addressed. The contact details should also be mentioned on the overall envelope.
7. Prices should be quoted in detail, for all the subsystems given in the Technical Specifications part of the tender. Further, bid and price validity should be for three months from the date of opening of the technical bids.
8. IISc will place the purchase order only on the successful bidder as per the decision of IISc. In this regard, decision of IISc will be final and binding.

## 10. Payment Terms

1. The total project cost will consist of Equipment supply and installation and comprehensive warranty for three years from the acceptance and successful installation as decided by IISc.
2. 100% payment shall be released by IISc against delivery, inspection, successful installation, commissioning, and acceptance of the equipment at IISc Bengaluru in good and functional condition and to the entire satisfaction of the Purchaser (IISc).
3. Payment will be subject to deduction of TDS as per rules / laws and any other deduction as per PO terms.

4. The total solution as per the agreed bill of materials must be supplied within 4-6 weeks after receiving a firm PO from IISc. The installation and acceptance must be completed within 2-3 weeks after supply of the equipment.
5. Liquidated Damage: As time is the essence for this procurement, hence the ordered materials are required to be delivered and installed in all respects within the stipulated period in the purchase order failing which penalty for late delivery and installation will be imposed at the rate 1% of the total order value per week or part thereof for the delayed period subject to maximum of 10% of the total order value and this liquidated damage will be deducted during the payment of the invoice / bill of the supplier. Earliest / expected delivery period should be clearly indicated in the technical bid.

## **11. Important Dates**

1. Release of tender: May 9, 2023.
2. Last date for sending queries: May 17, 2023, 5 PM IST. Queries may be sent to [tender.serc@iisc.ac.in](mailto:tender.serc@iisc.ac.in)
3. Release of corrigendum to the tender based on the queries, if necessary: May 19, 2023, 12 noon IST.
4. Start date for submission of the bid: May 19, 2023, 1 PM IST.
5. Last date for submission of the bid: May 30, 2023, 5 PM IST.

### **Mailing address:**

Chair  
Supercomputer Education and Research Centre (SERC)  
Indian Institute of Science (IISc)  
Bangalore – 560012  
India

## 12. Annexure A – Certificate from Bidder related to Make in India Orders

To:  
The Chair  
Supercomputer Education and Research Centre  
Indian Institute of Science  
Bangalore – 560012, India

We hereby certify that the goods being offered by us vide our proposal, comply with the provisions of Public Procurement (Preference to Make in India) Order No P-45021/2/2017-PP (BE-II), dated 15<sup>th</sup> June 2017 (PPP MII Order) and further revised vide Order dated 28<sup>th</sup> May 2018, 29<sup>th</sup> May 2019, 04<sup>th</sup> June 2020 and 16<sup>th</sup> September 2020 issued by Public Procurement Section, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI.

We hereby certify the details pertaining to goods offered by us, as given below:

SNo.	Item Description	Make & Model No.	Country of Origin of OEM	Country and Location of Manufacture of Item	Location in India at which local value addition is made, if any.	Percentage of Local Content
1	Two high-end servers along with monitors, keyboards and mouse as described in Section 2 of the Tender.					

Self-certification on Compliance to Make-in-India Order:

1. We hereby declare that

(Bidder Name) is a class 1/2 local supplier in accordance and manner as specified in Public Procurement (Preference to Make in India) orders mentioned above and OM No. P-45021/102/2019-BE-II-Part(1) (E-50310) dated 04.03.2021 issued by DIPP, Ministry of Commerce and Industries, GoI.

2. We also certify that the turnkey solution offered meets the local content requirement for 'Class-I local supplier'/'Class-II local supplier' [**tick one and strike out the other**], as per the Public Procurement (Preference to Make in India) Order.

We also certify that, we are not from a country sharing land border with India as defined in order No. F/No/6/18/2019-PPD dated 23 July 2020 issued by Public Procurement Division, Dept. of Expenditure, Ministry of Finance, GoI and the goods offered by us comply with the provisions of said order.

For (Name of bidder)



Authorized Signatory  
Name & Designation:  
Mobile No: