

TATA INSTITUTE OF FUNDAMENTAL RESEARCH
Homi Bhabha Road, Colaba, Mumbai – 400 005.
A Deemed University

Telephone: +91-22-2278 2886/2595/2887/2890
Website: www.tifr.res.in

Email: mukesh.suroshe@tifr.res.in
: triveni@tifr.res.in
: sheela@tifr.res.in
: deepak.baghele@tifr.res.in

Date: 04.05.2018

Notice Inviting Tender cum Tender Document (Two Part Public Tender) for the following items:

Procurement of of 16 Nos. of compute Servers and 01 nos of GPU Node (As per our technical specifications)

Public Tender No.	TIFR/PD/IC17-113/PUB
Published on	04/05/2018
Tender Fees	For Indian Supplier - Rs. 700/- For Foreign Supplier - USD 100/-
EMD	For Indian Supplier - Rs.2,28,000/- For Foreign Supplier -USD 3,350/-
Estimated Cost	Rs. 114.00 Lakhs
Type of Tender	Two Part Public Tender
Last date for Submission of Bid	06/06/2018 on or before 17.30 hours
Date of Opening Bids (Part-A)	07/06/2018 on 15.00 Hours

Both Technical Bid (Part A) and Financial Bid (Part B) to be submitted within the due date and time in separate envelopes and marked on top as Part A and Part B. These two sealed envelopes should be further put in one Master Envelope superscribed with the Tender No., Due Date in Bold Letters.

Please see attached sheet for conditions of tender.

Note: All future corrigendum/addendum will be published in TIFR/CPPP website only. All prospective bidders are requested to visit our website regularly for any such updates/Corrigendum/Addendum.

ADMINISTRATIVE OFFICER
(PURCHASE SECTION)
TIFR, MUMBAI

Technical Specifications:

A. Architecture, features and performance: Compute node: - 16 Nos.	
A.1	Half width 1U rack mount nodes
A.2	2 x (Intel® Xeon® Gold 6140 Processor 18-core, 2.3 GHz, 10.4 GT/s 24.75M cache) (Ready 36 cores)
A.3	Intel express chipset C621 compatible with above mentioned processor
A.4	12 x 16GB (Total 192GB) DDR4-2666 ECC RDIMM, configured in Dual channel mode.
A.5	Disks: <ol style="list-style-type: none"> 2 x 240 GB or more Enterprise SSDs (Solid State drives), SATA III, Hot swappable, configured in RAID1 (for OS). 1 x 480 GB or more Enterprise SSDs (Solid State drives), SATA III, Hot swappable. SSD should be compatible with the Kernels shipped with Scientific Linux 6.9 or above. Total no of Drive Bays should be minimum 06 numbers supporting 2.5” drives.
A.6	RAID: system should support SATA III with (at least) RAID 0, 1
A.7	Network: <ol style="list-style-type: none"> On board Gigabit Ethernet LAN port. Dual 10 G SFP+ ports System should be supplied with compatible 10G 7-Meter of DAC Fiber cable with factory crimped SFP+ Short Range, Multi-Mode, and short-range transceivers attached at both ends.
A.8	Management: IPMI with dedicated LAN, Virtual media over LAN and KVM over LAN support
A.9	Ports: Min. 2x USB, 1x VGA, 2x RJ45 LAN
A.10	Expansion Slot: 2 PCI-E 3.0 x 16 slots
B. Chassis for Item mentioned in A	
B.1	2-U chassis for standard 19” rack (appropriate quantity to accommodate 16 nodes)
B.2	Power Supply: <ol style="list-style-type: none"> System should come with fully redundant (N+1), hot swappable power supplies. High efficiency 80 Plus power supplies Power supplies should be rated to sustain full load and continue to work even if one of the power supply fails
B.3	Management: <ol style="list-style-type: none"> System should be supplied with management, configuration and monitoring utilities such as IPMI or virtual KVM or equivalent. System should be supplied with all the necessary licenses.
B.4	Proposed solution should include rack mounting kit, accessories and C13 type power cords.
B.5	Spare parts should be separately quoted which will be kept on site at TIFR :- <ul style="list-style-type: none"> Min. 1 No. of 240GB as per A.5 Min. 1 No. of 480GB SSD as per A.5 Min. 1 no. of spare power supply as per B.2 Min. 1 no. of system RAM module as per A.4
B.6	if applicable then network aggregator for all nodes within chassis,

Pre-Qualification Criteria:

1. Supplier representing the Original Equipment Manufacturer (OEM) should submit hard copy on OEM letter head for a) Manufacturers Authorization Form (MAF) quoting the tender reference number for which authorization is provided b) Confirmation of support service for the proposed products for a period of at least seven (7) years and confirming that the proposed products are not declared as end of sale / support c) Confirmation from OEM to support the project and provide continued support services during project implementation and post installation in all respects in the event of unforeseen circumstances arising from OEM partner.

2. To qualify to bid for this tender, supplier should give details of at least three customers in India to whom compute servers are already supplied and installed. Purchase order copies and contact details of the technical person(s) (customer end) associated with the order should be part of the technical bid. TIFR will have full authority to check on quality of technical services and support with your customers who have given orders for supply of compute servers. The projects must be pertaining to supply, installation, commissioning and integration of servers in an enterprise environment. Copies of purchase order and commissioning report (customer acceptance report) have to be submitted. A summary sheet listing out all the submitted orders mentioning details like date of order, customer name, contact person, value of order, value of the storage system, order completion date, nature of work should be part of the technical bid. The bidder should have executed at least 1 (one) project of 80% of the value of this tender OR 2 (two) projects 50% each of the value of this tender OR 3 (three) projects of 40% each of the value of this tender in the past five years.

3. The supplier should not be currently blacklisted by any central/state government department / public sector unit.

GPU Node: - Qty. 01 Nos.

Technical Specification:	
A.1	4U rack mountable with mounting Rails
A.2	Processor: 2 x (Intel® Xeon® Gold 6140 Processor 18-core, 2.3 GHz, 10.4 GT/s 24.75M cache) (Ready 36 cores)
A.3	Chipset: Intel Dual socket P (LGA 3647) supports, Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s
A.4.	Bays: 16 Hot-swap 2.5" SAS/SATA drives; Supports 8 NVMe drives
A.5	RAM: 8 x 16GB (Total 128GB) DDR4-2666 ECC REG
A.6	GPU: <ul style="list-style-type: none">• Populated with min. 1 x Nvidia Tesla V100 SXM2 GPUs,• Optimized for NVIDIA GPUDirect RDMA• Support 8 Tesla V100 with 300GB/s NVLINK
A.7	Graphics: ASPEED AST2500 BMC Onboard
A.8	Disks: <ul style="list-style-type: none">a. 2 number of 512 GB , SSD. NVMe Interface (Performance sequential - Read 3500 MB/s & Write 2,100 MB/s)
A.9	RAID: On board supported RAID 0, 1
A.10	Network: Dual Port 10 G, fiber, SFP+ ports
A.11	Management: IPMI 2.0 with virtual media onboard over LAN and KVM over LAN support
A.12	Ports: 1 x serial, 2x USB ports, 1 x VGA, 2x RJ45 LAN ports
A.13	Expansion slots: 4 PCI-E 3.0 x16 (LP) (GPU tray for GPUDirect RDMA), 2 PCI-E 3.0 x16 (LP, CPU tray)
A.14	Power Supply: 80 Plus, High efficiency Power supply to sustain full load with RoHS.

Bill Of Materials (BOM)

Sl. No.	Part No.	Description	Qty	Unit	Rate	Cost	Applicable levies in %				Total cost
							Levy - 1	Levy - 2	Levy - 3	Levy - 4	
1		Servers nodes as per the specification in 6.0 Technical Specifications: (6.A + 6.B)	16	No.							
2		GPU node as per the technical specification 7.0 GPU Node	01	No.							
3		Compatible 10G 7-Meter fiber based DAC cable with factory crimped SFP+ Short Range, Multi-Mode, and Short-Range transceivers attached at both ends. DAC cable transceivers should be compatible with switches from standard OEMs. weruu	20	No.							
Notes		All licenses, software and hardware items should be quoted with manufacturers part number									
		Any missed out hardware / software / license for the complete solution should be included as optional item and price given. If no missed out items are highlighted it is considered as the proposed solution is complete in all respects and successful bidder has to complete the installation and commissioning with the quoted items.									
		All accessories should be from the OEM only, local makes will not be accepted									
		Breakup of statutory levies should be given for each item									
		Quantities are indicative and may vary at the time of ordering									
		Licenses, processing and IO cards to be mentioned separately with part number wherever applicable.									

TATA INSTITUTE OF FUNDAMENTAL RESEARCH
(Deemed University)
HOMI BHABHA ROAD, COLABA, MUMBAI – 400 005
(PURCHASE SECTION)

Terms and Conditions

1. Preamble:

TIFR is a premier research institute located in Navy Nagar, Colaba, Mumbai, India. TIFR is hosting GRID Tier2 computing centre for CMS international collaborative experiment at CERN-LHC. The T2 centre provides computing facility for international collaboration as well as Indian participants on 24X7 basis.

This TWO PART tender is being floated is for supply, installation, testing and commissioning of 20 rack based servers for HPC/HTC environment, conforming to latest standards and tender guidelines.

- 2. PART “A” (Technical Bid) consisting of Technical Bid with Commercial Terms and PART “B” (Financial Bid) consisting of only Price** shall be submitted in **separate** sealed envelopes duly superscribed with the tender enquiry number, and the due date in bold letters, addressed to the Purchase Officer, Tata Institute of Fundamental Research, Homi Bhabha Road, Colaba, Mumbai – 400 005. The envelopes should be clearly marked on top as either PART “A” or PART “B”. The two sealed covers should be further put in a master cover superscribed with the Tender Enquiry No., Due Date in bold letters, addressed to the Purchase Officer, Tata Institute of Fundamental Research, Homi Bhabha Road, Colaba, Mumbai – 400 005. The sealed master envelop has to be delivered by hand/courier at the security Gate Officer of TIFR on or before **17.30 hrs on 06/06/2018**. The technical bid will be opened in the presence of attending tenderers at **15.00 hrs on 07/06/2018** at Purchase Section, TIFR Mumbai. Tenders submitted after **17.30 hrs on 06/06/2018** will not be considered.
- 3. In case the PART ‘A’ and Part ‘B’ bids are not sealed in separate envelopes the tender will be rejected.**
4. The technical bid should not contain any indication of the price. The bidder should take special care not to mention anything related to pricing and costing aspect of whatsoever nature. The technical bid should include/contain only technical specifications, technical literature, drawing, quantity, manufacturing and delivery schedule, mode and terms of payment, mode of despatch, the quantum and percentage of statutory levies payable by the purchaser as extra and all related commercial terms and conditions for the supply and for the services like erection and commissioning to be rendered by the tenderer. The details of the validity of the tender should also be indicated along with the commercial details.
5. After scrutiny of Technical Bids, Financial bids of only those bidders who are shortlisted on technical basis will be opened at on later date. The opening date, time and venue will be intimated to the technically successful bidder.

6. **Tender Document Fee:**

An Tender fee for **Rs. 700/-[for Indian Supplier]** and **USD 100 [For foreign Supplier]** (Non-refundable) has to be deposited in the form of Demand Draft, Fixed Deposit Receipt, Bankers cheque or Bank Guarantee from any commercial Banks or through online transfer through bank (Bank details to be provided on demand) in favour of **Registrar, Tata Institute of Fundamental Research, Mumbai** to be enclosed along with the technical Bid (Part - A).

7. **EMD:**

An Money (EMD) for **Rs. 2,28,000/- (for Indian Supplier)** and **USD 3,350/- (for Foreign Supplier)** has to be deposited in the form of Demand Draft, Fixed Deposit Receipt, Bankers cheque or Bank Guarantee from any commercial Banks or through online transfer through bank (Bank details to be provided on demand) in favour of **Registrar, Tata Institute of Fundamental Research, Mumbai** to be enclosed along with the technical Bid (Part - A).

Also, in lieu of above, the bidder can submit the EMD in the form of "**Bid Securing Declaration**" as per the attached format. The declaration also should be submitted on the company letter head duly signed by officer authorized to submit the bid.

EMD shall be interest free and it will be refunded to the unsuccessful bidder without any interest. EMD will be forfeited if the bidder withdraws or amend impairs or derogates from the tender in any respect.

8. **Suspension of Business dealing with bidder:**

In case the bidder who submits a "Bid Securing Declaration" fails to abide with the terms and conditions of the declaration or withdraw its bid before the award of the contract then TIFR reserve the right to suspend business dealings with such supplier for a period of three years. The above suspension shall be without prejudice to other remedies or action that may be initiated against the bidder as deemed fit by the competent authority.

9. **Bidders who have not accepted the job/order awarded to them or withdrawn from the tender process OR whose EMD/Security deposit has been forfeited in the past their bids will not be considered and treated as ineligible / disqualified.**

10. After downloading the documents please inform your company details such as name, address, telephone nos., contact person and email address etc. by email to us. (deepak.baghele@tifr.res.in, sheela@tifr.res.in, mukesh.suroshe@tifr.res.in, triveni@tifr.res.in) to enable us to inform prospective bidder for any corrigendum/changes if any; in the Tender document before due date.

11. Quotations must be valid for a period of 180 days from the due date.

12. Tenders containing correction, overwriting will not be considered. Late or delayed/Unsolicited quotations/offers shall not be considered at all. These will be returned to the firms as it is. Post tender revisions/corrections shall also not be considered.

13. Tenderer should sign on all the pages of the technical bid and the price bid.

14. The price quoted for Import item must be on following basis:

- a) Ex-Work/factory duly packed airworthy/seaworthy and of international standard.
- b) FOB/FCA
- c) CIF Indian Port (all-inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)

For local item /supply, offer should be on FOR basis (i.e. total landed cost for delivery at TIFR, Mumbai).

The dimension of the item (viz. H, W, L, weight etc.) shall be specifically stated and also mention whether the mode of shipping the item is Airworthiness / Seaworthiness or both. Accordingly, the mode of shipment will be decided by TIFR.

Price must be quoted in the Price Bid Format attached herewith as “Part – B” (Financial Bid).

- 15.If equipment offered is to be imported, arrangements for import will be made by us.
- 16.Tenders who do not comply with any of the condition are liable to be rejected.
- 17.The Institute shall be under no obligation to accept the lowest or any other tender received in response to this tender notice and shall be entitled to reject any tender without assigning any reason whatsoever.
- 18.TIFR reserves the right to place the order for part/reduced quantity than what is specified in the tender.
- 19.**PAYMENT TERMS:** **80%** payment shall be made through irrevocable L/C on presentation of complete and clear shipping documents and balance **20%** of the amount shall be released after the receipt, installation, commissioning and acceptance of the equipment and on submission of "**Performance Bank Guarantee**" or "**Standby Letter of Credit**" for an amount equivalent to **10%** of the Purchase Order Value. The PBG or "Standby Letter of Credit" shall be valid for a period of **60 days** beyond the date of warranty period.
 - Bank Guarantee(BG) will not be accepted directly from Supplier, it should be received through the banker of supplier.
 - In exception case, BG will be accepted directly from the party/supplier provided a covering letter with Xerox copy of BG is received directly from banker of supplier.
 - Without the receipt of BG along with the letter from Bank, the payment will not be released.
- 20.The delivery period should be specifically stated and earlier delivery may be preferred.
- 21.TIFR is exempted from paying of **Custom Duty** under the notification No.51/96 dated 23.07.1996, for all procurements/supply meant exclusively for Educational, scientific and research purpose. Whenever the exemption certificate not honored by the authorities, the applicable duty will have to be paid. Hence Custom duties, if any, should be shown separately.

TIFR is a public funded research institute and is entitled to concessional rate of GST @ 5% for certain items supplied for research purpose vide notification no. 47/2017 and 45/2017 dated 14th Nov, 2017. The offer should be submitted after fully considering the above notification.

22. **The Supplier shall arrange to ship the ordered materials within the mutually agreed delivery period mentioned in the order unless extended with/without penalty.**

- a. In case of delay in supply on part of the supplier, a penalty @0.5% per week of order value will be charged for delayed period subject to a maximum of 10% order value.
- b. If the delay in the shipment of the ordered materials attributable to the supplier exceeds agreed time period from the date of original agreed upon date of shipment and extended with/without penalty, the TIFR, Mumbai shall have the right to cancel the contract / purchase order and recover the liquidated damages from other dues of the party or by legal means. It will also affect the other/future business dealings with such suppliers.
- c. The same rate of penalty shall be applicable for late installation of the equipment/instrument also.

23. COMMENCEMENT OF WARRANTY PERIOD: The warranty period of an item shall commence from the date of receipt of the item in good working condition and satisfactory installation/commissioning/demonstration at the project site.

24. Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time, it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer.

25. OBSERVANCE OF LOCAL LAWS: Wherever applicable (particularly for Local vendors), the vendor / contractor shall comply with all law, statutory rules & regulations etc. The vendor/ contractor shall obtain all necessary permits / approval from the local Governing Body, Police, and other concerned Authorities as may be required under law. The vendor /contractor shall pay all types of taxes, fees, license charges, deposits, duties, tolls, royalty or other charges that may be leviable on account of any the operations connected with the execution of this work/ contract.

26. In case of any interpretational issues arises in this tender, the interpretation/decision of TIFR shall be final and binding on the bidder.

27. It is the responsibility of the vendor to make sure that the system being proposed can be exported to India with TIFR as the end user. All clarificatory documentation must be submitted with the Bid.

28. TIFR reserve the right to ask for or to provide any clarification, changes after the release of this tender. **Any changes or clarifications provided by TIFR may be checked at TIFR website www.tifr.res.in/tenders**

29. **Scope of Work:**

The scope of work in brief includes supply, installation, testing, commissioning of compute servers. The equipment's to be supplied and commissioned in TIFR campus at, Homi Bhabha Road, Mumbai – 400005.

30. Others:

- a. The supplier shall bear all costs associated with the preparation and submission of the tender. TIFR will not be responsible or liable for part or all of those costs under any circumstances.
- b. Supplier should have a team of qualified and experienced engineers to handle the project. Details of local technical manpower should be submitted with the technical bid. Supplier should have full-fledged office and support personnel stationed in Mumbai.
- c. If required supplier shall organize site visits to their completed sites during the process of technical evaluation.
- d. The successful bidder shall give an undertaking that internal IT infrastructure setup of TIFR shall not be disclosed to anybody.
- e. The OEM shall also be responsible for proposed solution, successful project implementation and post installation support.
- f. Obsolete or near end of sale products will not be accepted.

31. Support and technical requirements:

- a) The proposed solution, hardware and software, shall have comprehensive onsite warranty for five years (5) from the date of final sign-off by TIFR. Release of new version of operating system, application, firmware, bug fix patches etc. for the supplied equipment should be patched / upgraded for stability and security of the system by supplier / OEM team. Supplier / OEM support team should advise and support this activity during the warranty period. Letter by OEM on last date of warranty for the supplied equipment should be submitted for release of balance payment. The ordered application software shall be upgraded to new versions and new releases during the warranty period.
- b) All supplies, hardware and software, shall have five years' on-site support service window 8x5 (hrs x days), with NBD spare parts delivery. The supplier's technical team on 8x6 should register the service call and take immediate action. If need arises they should visit the site to resolve the problem. Problem diagnosis and spare parts ordering / initiating shipping from the supplier stock / OEM stock should be completed within 4 hrs. of raising the service ticket. TIFR should have privilege to open service ticket directly on supplier/OEM support portal. Any configuration changes or enabling of built-in feature on the devices should be serviced by supplier's team / OEM during warranty period.
- c) All equipment proposed shall be compatible for standard 19" IT rack installation. Necessary mounting brackets, railings, power chord etc. should be part of the proposal.
- d) Supplier should submit along with technical bid schematic of the proposed solution.

- e) The decision to accept the proposed complete solution lies with TIFR and is final and binding. Only technically qualified bidders commercial bid will be opened if all other criteria are met.
- f) The successful bidder should submit as-built installation documents, drawings / schematics of the complete system giving all details before handing over the system to TIFR.
- g) All active equipment / component proposed should be of enterprise / carrier class only. TIFR will have full right not to accept items which are not of enterprise class during evaluation and / or after supply.
- h) Vendor should provide complete power budget calculation with effective BTU and cooling requirements.
- i) All chipsets, Controllers, RAID cards, Motherboards, firmware and Management software and components should work “Out of box” with Scientific Linux 6.9 and above. (<http://www.scientificlinux.org>).
- j) Product and all its components should meet the latest Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by 2011/65/EU (RoHS 2).
- k) DO NOT quote bundled pricing.
- l) Quantity may increase or decrease while placing the order.
- m) All equipment should be IPV6 compliant and work in dual stack IPv4 & IPv6.

ADMINISTRATIVE OFFICER
(PURCHASE SECTION)
TIFR, MUMBAI

TIFR Enquiry No & Date: _____

Due date: _____

Part 'B'

Bidder's Quotation Ref No. & Date: _____

Financial Bid

Financial Bid (Bidders must quote their rates using this Format)

Sr. no.	Item Description as per the Tender/Inquiry	Make/Brand/ Type	Rate per unit	Qty	Basic Cost of main item (In Currency)_____
A					
B	Ex-Works cost (Duly packed Airworthy/Seaworthy of international standard)				
C	FOB /FCA Cost (Name of Airport_____)				
D	CIP/CIF Cost (Upto Mumbai Airport)(all inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)				

Note:

1. All the column should be appropriately filled and not left blank
2. Do not include any other charges, taxes, duties etc. in the Basic Cost of the item,
3. Any accessories, optional items should be shown separately using above format.
4. Use separate sheet for detail description, specification of the item, but prices should be quoted in same format.
5. Prices quoted in Indian Currency should be on F.O.R. basis and mentioned separately using different table format showing all the applicable taxes/Duties like CGST,SGST,IGST, Freight & Transportation charges and installation charges etc.
6. TIFR being educational & research institute, discounted price shall be offered.

Signature of the Bidder

Name, Address, contact no _____

& Email id of the Bidder/Company _____

with company's stamp or seal _____

Date: _____

Place: _____

Bid Securing Declaration

(to be submitted on company's letter head)

I/We the undersigned hereby declare that if we withdraw or modify the bids during the period of its validity, or if we are awarded the contract and fail to sign the contract, or to submit a performance security before the deadline defined in the request for bids document or fail to execute the contract, we will be suspended for the period of time specified in the request for bids document from being eligible to submit bids for contracts with the entity that invited the bids.

Name and Signature
of Authorized Signatory
and Company Seal