

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

PUBLIC TENDER NOTICE No. 23/DEC/2017 Ref No: ICTS/TIFR/IT/2017-18/07

Tender for Supply & Installation of High Performance Computing Cluster (2048 Cores)

International Centre for Theoretical Sciences (ICTS) Survey No. No. 151, Shivakote Hesaraghatta,
Bangalore – 560 089, India
Tel: +91 - 80 – 4653/6730 6000
Please let us have your Quotation for the following:



Sr. No.	Description	Qty.	UOM
1	Supply & Installation of High Performance Computing Cluster (2048 cores)	1	JOB
	(Details as mentioned below)		
	NOTE: For further details please contact,		

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Estimated cost : Rs. 3.20 Cr EMD Amount : Rs. 5,00,000/-

Pre-bid meeting : January 17, 2018 @ 11:00 hrs. Last date for submission : January 29, 2018 till 15:00 hrs. Date of opening tender : January 29, 2018 at 15:30 hrs.

Important Instruction: The bids shall be enclosed in an envelope and sealed duly marked "Tender for Supply & Installation of High Performance Computing Cluster (2048 cores) at ICTS Campus," Ref No. ICTS/TIFR/IT/2017-18/07; and addressed to "Administrative Officer" at the address given below. The bids are liable to be rejected if the sealed envelope is not addressed to "Administrative Officer" with Tender Ref No. and Item Description. Offers delivered in person shall be deposited in the Tender Box kept in the Office. If the bids are sent through courier or mail, it should reach by submission date and time and ICTS will not be responsible for the delay.

Important Instruction for the bidders:-

Pre-Bid Meeting: For information / technical details / clarifications required by the bidders, a Pre-Bid meeting will be held on 17/01/2018 @ 11.00 hrs at ICTS and interested bidders are requested to attend the same. All queries related to tender should be emailed to purchase@icts.res.in before the pre-bid meeting. Queries received after the pre-bid meeting will not be entertained. Corrigendum, if any, will be put up on the ICTS website.

Sealed tenders are invited under 2 cover system from reputed OEM (Original Equipment Manufacturer) / Registered and Licensed Vendors for Job Contract at International Centre for Theoretical Sciences, Survey No. 151, Shivakote, Hesaraghatta, Bangalore - 560089 (India).

The Technical and Price Bids shall be submitted simultaneously in two cover (sealed) system. The proposals shall be evaluated in two stages: (1) Technical and (2) Price. Technical evaluation will be carried out and those Vendors who score minimum 80% and above will qualify for Price Bid opening. Thereafter Financial proposal shall be evaluated. The Commercially Lowest Bidder shall be the first preferred Vendor for the Award of Order. (Pl. refer Information to bidders at Page N/15.)



Please read carefully - instructions for the bidders and Scope of Work.

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The prospective Vendors should note that high quality of service is the essence of this contract.

- **A)** Acceptance of Technical specifications, **Annexure A** and terms and conditions. Tender document to be enclosed with Date, Signature and Seal in every Page.
- **B**) Complete Technical details should be provided for the Instrument offered (Specifications, Technical Parameters, Advantages, etc.,)
- C) Details of Warranty Services.
- **D**) Copies of the Purchase Orders for having supplied similar Instruments in India. Annexure B Schedule of Experience of last **5** years
- E) Schedule of deviation from specifications / conditions Annexure C.
- F) Any other information the bidder would like to provide with Date, Signature and Seal
- **G)** The tenders should be submitted in two sealed covers. This tender will be evaluated under 2 cover bid system as described above.
- **I.** The <u>First sealed cover COVER I</u> should be <u>superscribed</u> "Technical Bid" and should contain Annexures A, B and C duly accepted, signed by authorised signatory with seal.

II. The cover I shall also contain the following documents:

- **a**) Company profile including previous experience. Please attach copies of Work/Purchase Orders, Completion Certificate, etc.
- **b)** Acceptance of terms and conditions specified in these tender documents
- c) Demand Draft /Bank Guarantee in lieu of Earnest Money Deposit (Refer to point No. 23 on Page No. 10)
- d) Solvency Certificate issued by your banker
- e) Copy of valid PAN number issued by the Income-Tax Authority, Registration Certificate of the firm /agency /Company and proof of 5 years' experience.
- **f**) The copy of audited financial reports/IT returns of the bidder for the financial years 2016-17, 2015-16 and 2014-15 indicating the annual sales turnover required for eligibility criteria.
- **g)** Duly filled technical bid with proper seal and signature of the authorized person (with name, designation & contact no.)
- **h)** An authority letter issued by the competent authority authorizing the signatory to sign on behalf of the bidder.
- i) Bidder must describe in detail the technical support they will be able to provide in Bangalore. Only those companies will be considered who have engineers based in Bangalore who have been trained on the machines being quoted for, prior to the date of installation.
- j) The bidder is to submit a CD/DVD containing all the technical specifications of the quoted equipment (to be submitted off-line, before the last date and time of submission)
- III. The <u>Second sealed cover COVER II</u> superscribed 'Price Bid' should contain Annexure D(1) and Annexure D(2).



THE ABOVE MENTIONED TWO COVERS i.e., **COVER-I & COVER-II** SHALL BE SEALED INDIVIDUALLY ON THE OUTSIDE WITH WAX SEAL BEARING THE LOGO/NAME OF THE COMPANY SUBMITTING THE BID.THESE TWO COVERS SHALL BE AGAIN PUT INTO A SINGLE WAX SEALED COVER superscribed <u>"Tender for Supply & Installation of High Performance Computing Cluster (2048 cores) at ICTS Campus".</u> This should be addressed to Administrative Officer, International Centre for Theoretical Sciences, Survey No. 151, Shivakote, Hesaraghatta, Bangalore - 560 089, India. The bid should be submitted before 15:00 hrs on 29/01/2018. The Technical Bid will be opened on 29/01/2018 at 15.30 hrs.

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On the date of tender opening (i.e. on 29/01/2018), only the Technical Bids shall be opened in the presence of attending bidders. The Technical bids shall be evaluated subsequently and only the shortlisted firms will be called for attending the price bid opening. Intimation for attending the price bid opening shall be sent to the short listed firms in advance.

Since TIFR is a Deemed University and an Educational Institute, please consider us for the necessary educational discount if any.

Due Date for submitting your offer is 29/01/2018 (15.00 hrs).

For and on behalf of International Centre for Theoretical Sciences

Administrative Officer



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I. Preamble:

To augment the institute's information technology (IT) infrastructure we are floating this public tender. This public tender is for supply & installation of specified High Performance Computing Cluster (2048 cores) equipment at ICTS campus, Shivakote, Bangalore – 560089.

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II. Pre-qualification for bidder

Mandatory requirements for a bidder to qualify as a participant in this tender:

- 1. The bidder should have executed at least 2 projects using an architecture and technologies similar to those being proposed in their quotation against this tender. In addition, the following condition should also be satisfied.
 - At least one order of 80% of tender value or
 - At least two orders of 60% of tender value or
 - At least three orders of 40% of tender value

Purchase order copies of the same must be submitted with the technical bid. The OEM or partner should have successfully executed projects at premier Indian Defence organizations or premier Indian Academic and Research institutions like IISc, TIFR, IISER, IIT, JNCASR or institutions of equivalent stature.

- **2.** All warranty and support must be serviced directly by the OEM. ICTS requires that there be a SPOC from OEM who is responsible for all issues between ICTS and the OEM.
- **3.** The bidder should have average annual sales turnover of at least 4 Cr for the last three financial years.
- **4.** 5 years comprehensive warranty is required for all equipment proposed in the quotation. Warranty for years 6 and 7 are to be submitted as a separate line item, which will be considered for commercial evaluation. Centre reserves the right to include/exclude the 6th & 7th year warranty in the contract.
- **5.** All quotations submitted must follow the prescribed format for technical compliance as in document below. Failure to do so will result in the quotation being summarily rejected.
- **6.** Product offered should not have end-of-life (for sales) for next three years.
- 7. The bidder should submit the Manufacturer's Inspection Certificate (Refer to point No. 50 on Page No. 14)
- **8.** The OEM/Vendor should have at least one service Center in Bangalore. The OEM/Vendor should have service engineers in the relevant field of quoted item.
- **9.** The bidder should submit the BIS certificate for the quoted hardware.
- **10.** The OEM and Bidder should have valid ISO certification. Please attach a copy of the certificate.



III. Scope of Work:

1. Scope of Contract

- 1.1. The following Annexures are part of the tender documents under reference:
 - a) Annexure -A Scope of work
 - **b)** Annexure B (1) Schedule of Experience of last **5** years
 - c) Annexure -B(2) Annual Turnover
 - **d)** Annexure C Schedule of Deviations from specifications / conditions

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e) Annexure – D (1) & D (2) – **COVER – II - Price Bid**

The Bidder shall fill in Annexures B, C & D completely and submit them along with their bids. All details and columns shall be filled, and if a particular column (s) in any annexure(s) does/do not apply, it may be indicated by saying why it is not filled (for e.g. 'no deviation', not applicable, not relevant, etc.) – leaving blank columns or a bare hyphenation may disqualify the bidders.

- 1.2. The details of rates for carrying out the work shall be indicated by the Vendor in Annexure "D". Vendors are requested to quote separately for the following:
 - a) Master Node
 - b) Compute Node
 - c) Cluster Interconnect Switch
 - d) Hardware installation, warranty and support.

The Vendor needs to do a site visit to check for feasibility and are advised to discuss with System Administrator to get more details on the requirement before submitting the Bids.

- 1.3. Once the Purchase order is issued, the Vendor will receive instructions from an Officer designated for this purpose (Officer -in-charge) or his authorized nominee and the Vendor thereby undertakes to abide by his/her suggestions/instructions, etc. as regards services in this agreement.
- 1.4. Addition/alterations in scope of work: Any alteration or addition to the scope of work will be communicated to the Vendor and the Vendor shall carry them out. For any reduction / increase in the Scope of work, the decrease/increase in the rates shall be negotiated and finalised simultaneously.

2. Quality and Scope of Services

- 2.1. It is normally understood and agreed between both the parties that the Centre will not be responsible or be liable for any laws that are in force/that may come into force from time to time in respect of personnel engaged by the Vendor and the Vendor alone will be solely responsible for the terms and conditions of their services, safety, health, statutory requirement, etc.
- 2.2. The successful Vendor shall indemnify/deemed to have indemnified the Centre for all claims/losses arising out of this tender. The Vendor is deemed to have indemnified the



Centre against any claim by any authority once the work order is awarded. In the event the Centre has to pay any individual, statutory body or any agency for reasons directly or indirectly attributable to this tender, the Vendor only shall pay such claim/damages and even if the Centre is called upon to pay, such damages/penalties and or cost shall be recovered from the Vendor's dues/amount payable or shall be paid by the Vendor on a demand from ICTS.

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The successful bidder shall execute an irrevocable indemnity bond in an appropriate stamp paper in favour of ICTS that they would indemnify and keep ICTS indemnified and harmless against any claims, losses, expenses which ICTS may suffer or incur as a result of breach of contract. The Vendor shall further agree that the indemnity herein contained shall remain in full force and effect during the pendency of the contract and that it shall continue to be enforceable till all dues under or by virtue of the said contract have been fully paid and all claims are discharged or till ICTS is satisfied that the terms and conditions of the joint agreement have been fully and properly carried out by the Vendor. The Vendor also should undertake not to revoke this indemnity during its pendency with ICTS. Previous consent in writing to be obtained.

2.3. The Vendor shall follow all rules as may be existing or may be framed from time to time at ICTS on all aspects covering this tender. Material movement, entry/exit of personnel, identity card, safety, etc. shall be according to procedures existing in ICTS as amended from time to time.

IV. Terms and conditions of the tender:

- 1. Quotations must be submitted giving complete details using enclosed tender papers.
- 2. The rates quoted shall remain valid for a period of 180 days from the date of opening of Price Bids.
- 3. Bidder may quote in USD for better price benefit to ICTS.
- 4. Each page of the tender except the Price & Delivery part shall be on printed letterheads or forms and bear the signature, date, name and designation of the person signing the offer. If they are not on letterheads, a rubber stamp indicating full name, address and phone No., Telex No., Fax No. etc. of the firm shall be affixed at the end of each page.
- 5. Bids in sealed envelopes duly superscribed in bold with the Tender Title, reference No. and due date, addressed to the Administrative Officer, International Centre for Theoretical Sciences, Survey No. 151, Shivakote, Hesaraghatta, Bangalore 560 089 (India) shall be sent by post/courier so as to reach us before the prescribed time.
- 6. The tender documents may be downloaded from ICTS website or CPP Portal.
- 7. This tender document/form is not transferable. Only the party to whom the tender documents have been issued shall be entitled to quote.



8. Bids containing erasures or alterations will not be considered, unless countersigned by the authorized signatory.

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- 9. All rates and total amount should be written both in figures and in words and if there is any discrepancy between the two, the lowest amount will only be accepted.
- 10. Bids which do not comply with the above conditions will be rejected.
- 11. The Centre shall be under no obligation to accept the lowest or any tender received in response to this tender notice and shall be entitled to reject **any or** all tenders without assigning any reason whatsoever.
- 12. The Centre reserves the right to split the contract in parts and award them in pieces to the successful bidders or to delete the contract in parts after entering into the contract.
- 13. No questions or items in the Annexures shall be left blank or unanswered. Where you have no details or answers to be provided a 'No' or 'NIL' or 'Not Applicable' statement shall be made as appropriate. Forms with blank columns or unsigned forms will be summarily rejected.
- 14. The Vendor chosen will have to deliver the equipment within 10 weeks of issuance of purchase order and commission them within 4 weeks from the date of delivery.
- 15. Tenders will be opened in the presence of attending bidders on 29/01/2018 at 15.30 hours. In the event the due date is declared as holiday, the tender will be opened on the following working day.
- 16. If the item offered is to be imported, arrangements for import will be made by the bidder. Documents with regard to import duty exemption and customs clearance will be provided by the institute.
- 17. ICTS reserve the right to place order for part/reduced quantity than what is specified in the tender and also reserve the right to split the order to more than one supplier.
- 18. Any deviation/substitution in regard to the technical specification must be indicated in Annexure C of this tender document. Otherwise it shall be binding on the bidder to supply the items as specified in this tender specification.
- 19. Tenderers are required to submit all necessary documents and update the checklist of documents. (Page 22)

TENDERS RECEIVED LATE OR AFTER THE DUE DATE WILL NOT BE CONSIDERED. ICTS RESERVES THE RIGHT TO ACCEPT, REJECT ANY OR ALL TENDERS WITHOUT ASSIGNING ANY REASONS THEREOF.

20. The installation site will be ICTS campus, Shivakote, Hesaraghatta, Bangalore-560089.



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- 21. Individuals signing the bid form and other supporting documents must specify the capacity in which they sign:
 - a. Whether signing as a Sole Proprietor of the firm or his attorney.
 - b. Whether signing as a partner of the firm or his attorney
 - c. Whether signing for the firm as Agent.
 - d. Whether signing as Director of a Limited Company.

22. CATALOGUE/TECHNICAL LITERATURE

All necessary catalogue/drawing literature/data and details of item/s as are considered to be essential for full and correct evaluation of the bid shall invariably accompany the bid.

23. BID GUARANTEE / EARNEST MONEY DEPOSIT:-

Bid Guarantee amount details are as below:-

Sl. No.	Item Description	BGA/EMD Amount
1.	Supply & Installation of High Performance Computing Cluster (2048 cores)	INR 5,00,000.00

The EMD/BGA shall be submitted by a DD (for outstation firms) or Banker's cheque (in case of local firm) from a Commercial Bank/ Foreign Bank (First class Bank) along with the bid, drawn in favour of "International Centre for Theoretical Sciences, Bangalore". Alternatively, the EMD amount may be submitted by way of Bank Guarantee from a Commercial Bank/ Foreign Bank (First class Bank) valid for 6 months (no other mode of payment will be accepted). The BGA amount will be forfeited if the successful bidder fails to accept the Letter of Intent/ Purchase order or withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender. The offers are liable to be rejected, at the discretion of the Centre, if they are not accompanied with EMD/BGA. No interest shall be payable by ICTS for Bid Guarantee Amount. The BGA shall be refunded to the unsuccessful bidders once the order is released on the successful bidder.

The EMD may be forfeited:

- a. If the bidder withdraws the bid during the period of bid validity specified in the tender.
- b. In case a successful bidder fails to furnish the Performance Bank Guarantee.
- c. If the bidder fails to furnish the acceptance in writing, within 7-days of award of contract/order.

24. AUTHORITY OF AGENTS

In case where a bid is submitted by an Indian Agent on behalf of his foreign principal, such bid should be supported with a letter of Authority from the principal that the Indian Agent has been authorised to submit the bid on behalf of the principal. The indigenous manufacturers shall submit their bids directly.

25. PRICE

The price/s quoted shall be firm till the complete execution of the order. All details relating to price, price breakup, inland transportation, documentation, taxes and duties, levies, Road/AIR/Marine freight charges, delivery terms (ex-works/F.O.R/F.O.B/C.I.F.) mode of payment, mode of Despatch, Insurance, Agency Commission, if any, should be clearly



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stated. The bidders must indicate (separately) the price in the following formats:

- a. Ex-works (all other charges to be indicated separately).
- b. C.I.F. (cost of goods, packing & forwarding, documentation, freight, insurance, etc. all included). However, freight & insurance charges to be indicated separately.
- 26. Please specify all the taxes (State, Central, Turnover tax, Works Contract Tax, etc.) which are applicable. The duties and other levies, freight, insurance shall be stated clearly and separately. Also please mention whether the same is included in the price/s quoted.

27. VALIDITY OF BIDS

The bids should be valid for a period of 180 days from the date of opening of the Price bids. Bids with shorter validity period are liable for rejection.

28. DELIVERY

The bidder should clearly mention the time required for supplying the item. The period of delivery will be counted (a) from the date of receipt of the order in case of Indian supplier and (b) from the date of opening of letter of credit/receipt of order (in the case of sight draft/advance draft) for foreign suppliers. The delivery date is the date at which the equipment should be delivered at ICTS, Shivakote.

29. PACKING

The item should be packed appropriately so that it can sustain transit hazards, multiple landing, warehousing, etc. during transit.

30. PLACE OF DELIVERY

In the case of items indigenously manufactured, ALL DELIVERIES shall be effected to the International Centre for Theoretical Sciences, Shivakote, Hesaraghatta, Bangalore-560089, whereas the foreign suppliers shall effect delivery up to Bangalore Airport, India by AIR only unless otherwise specified.

31. GUARANTEE/WARRANTY

The item/s covered under this tender shall be subject to a guarantee for trouble free performance, workmanship, material etc., fulfilling the specifications mentioned in this tender for min. 60 months (72/84 months if 6th & 7th year warranty is considered) from the date of commissioning. If any defect is found in the material, workmanship or performance during the guarantee period the same may either be repaired/replaced by the supplier as the case may be free of charge. The guarantee period for replacement of parts or repair work shall be same as above. A guarantee certificate to this effect should be forwarded to us with your invoice. For order placed on foreign suppliers, the supplier shall specifically confirm that their Indian representatives, if any, will provide with after sales service and will attend to any repairs or technical problems that may arise.

32. PERFORMANCE B/G

The successful bidder shall have to execute a performance B/G in accordance with the guarantee/warranty for 10% value of the order. This B/G has to be executed on an appropriate value of stamp paper in terms of a bank guarantee drawn on any Nationalised Bank or first class Foreign Bank and shall remain valid till the completion of the Defect Liability period/warranty period, with **6 months** claim period.



33. TAXES AND DUTIES

The Centre shall deduct all taxes and duties, as applicable, from time to time from the bills payable.

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34. PAYMENT TERMS

As per ICTS norm, 80% of the payment shall be made through Sight Draft (documents through bank) and balance 20% payable after installation, trial run and subject to acceptance by the group head through SAI and all other relevant documents, with Performance Bank Guarantee.

All claims shall cease as per the Limitation Act.

35. CLARIFICATIONS

After opening the bids, if it becomes necessary for the purchaser to seek clarifications from the bidders, the same will be sought from the bidders. In such an event, the bidders will furnish all technical information / clarifications to the purchaser to reach on or before the due date fixed for that purpose indicating the Purchaser's tender reference. If the technical clarifications sought do not reach on or before the date fixed, the bids shall be summarily rejected without any further notice.

36. RISK CLAUSE

Notwithstanding the other terms and conditions therein, any additional cost incurred due to the procurement of the product as required for the contract, which are not delivered by the vendor or not as per the specification will be borne by the vendor. The vendor will be liable for any loss which ICTS may sustain by reason of such risk, in addition to penalty.

37. DISPUTE AND RESOLUTION

Any dispute or differences between the parties that cannot be settled by mutual discussion at appropriate levels shall be referred to the sole arbitration of the Director, ICTS or his nominee and his decision in the matter shall be final and binding upon the parties to the dispute. The venue of arbitration proceedings shall be Bangalore. In respect of any matters pertaining to such arbitration, the courts of law in Bangalore will have exclusive jurisdiction.

38. OTHER TERMS

- a. If electrical/ AC/ technical works contract, appropriate license defining the required expertise from the approved Licensing authority.
- b. The Centre, will at its discretion ask for a solvency certificate from your bankers.

39. DEFINITION AND MEANINGS

In constructing these conditions, specifications, etc. in the tender document or the Annexures/Appendices the following words shall mean herein assigned definitions except where the subject context is otherwise stated.



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PURCHASER : Shall mean the International Centre for Theoretical

Sciences

BID/TENDER : Shall mean the proposal/document that the BIDDER

submits in the requested and specified form or

otherwise along with Annexures, Appendices, etc.

BIDDER/TENDERER : Shall mean the firm/party who quotes against an

enquiry.

CONTRACTOR/SUPPLIER: Shall mean the party to whom a Work Order/Purchase

Order is awarded to undertake all or a part of the work covered by this tender document as well as and amendment orders relating to this tender issued by the Purchaser and shall include his/their legal

representative, assignee/s or successor/s.

CONTRACT : Shall mean and include the articles of agreement,

Declaration form, the general and special conditions, the Annexures, the Schedule of Quantities & rates and the specifications attached hereto and the drawings, if

any.

ORDER VALUE : Shall mean total value of the Purchase Order/Work

order issued against this tender item including taxes,

levies, etc.

40. TECHNICAL SPECIFICATIONS

See Annexure – 'A'

- 41. For imported items, final price after totalling the prices of the individual items has to be mentioned with estimated freight, insurance, agency commission charges, etc. The price shall be FOR CIF ICTS, BANGALORE and Ex-works.
- 42. The quantity mentioned in the tender may be decreased/increased while ordering. However, the price quoted should be firm irrespective of change in the quantity.

43. ACCEPTANCE OF TENDERS

ICTS does not pledge itself to accept the lowest/ any tenders and reserves to itself the right to accept the whole or part of the tenders or a part of the quantity offered.

- 44. The firm may quote in Foreign Currency for direct import on CIF basis as well as in Rupees on FOR ICTS basis for local supply. Please indicate insurance, freight and other charges separately for direct import.
- 45. Your Service Engineer should be fully trained to install the equipment and capable of maintaining the equipment during / after the warranty period.



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46. LIQUIDATED DAMAGES:

The successful bidder will have to agree that in case the item is not supplied within the agreed delivery schedule and after a grace period of seven days, then Liquidated Damages (not in terms of penalty) will be imposed automatically and be deducted from their bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

- 47. Please enter Unit Price, Total Price and Grand Total in figures as well as words. Unit Price and Total Price may be entered below each item.
- 48. Since ICTS is a Public funded Research Organisation, registered under Government of India Notification No.51/96 – Customs and 10/97 – for Central Excise is applicable for the items listed in the notification.

49. Completeness Responsibility:

Notwithstanding the scope of work, engineering, supply and services stated in bid document, any equipment or material, engineering or technical services which might not be even specifically mentioned under the scope of supply of the vendor and which are not expressly excluded there from but which – in view of the bidder – are necessary for the performance of the equipment in accordance with the specifications are treated to be included in the bid and has to be performed by bidder. The items which are over & above the scope of supply specified in the Schedule of Requirements may be marked as "Optional Items".

50. Manufacturer's Inspection Certificate:

After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. After the issue of Manufacturer's test certificate, the integrated servers will be shipped directly to ICTS and any type of disassembly is not acceptable. The purchaser reserves the options to be present at the supplier's premises during such inspection and testing.



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PUBLIC TENDER NOTICE No. 23/DEC/2017

Cluster Interconnect Switch

	INFORMATION TO TENDERERS:	<u>.</u>
The Tender s	shall be evaluated under 2 (Two) Bid System	
T	Technical Bid	
II	Financial Bid	
	TECHNICAL EVALUATION CRITERIA WITH M	A DIZC
G. N.		
Sr. No.	Items	Max Marks
1	Meeting all mandatory requirements	20
2	Master node	20
3	Compute node	30

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Vendors should score minimum 70% in each category listed above & overall 80% to qualify for price bid opening. Those Vendors who score minimum 80% & above will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

Manufacturer's Inspection Certificate & Warranty



TENDER SPECIFICATIONS ANNEXURE – A - SCOPE OF WORK

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The scope of work includes the following,

Specifications for ICTS cluster for a total of 2048 cores.

Mandatory Clause

- 1. The detailed BOM with part codes should be submitted. Hardware and tested operating system (pl. refer point 7, preferred OS) support for the cluster should be directly from the OEM to qualify for this tender
- 2. A minimum of 1024 CPU cores should be accommodated in a single 42U rack. The master and compute nodes should be dense form factor designed for cluster solution and should be in the lowest footprint and the lowest power consumption
- 3. All the server components should be verified and recommended by the motherboard manufacturer
- 4. All the software deployment will be in ICTS's scope of work and vendors are requested not to include any software deployment charges in their proposal
- 5. Servers must be factory integrated, tested, validated and certified. No on-site or local assembling of the system at ICTS site is allowed. Only rack-mounting, OS and application installation is allowed on-site

Mandatory Items

Com	Compute Hardware		Make/Model/Remark be filled by the Vendor Make Model Remark		Vendor
Sl	Description				
No 1	Master node	1 Nos.			
	2 x Intel Gold series, minimum 2.1 Ghz clock speed, minimum 16 Cores or above (Intel® Xeon® Processor 6130 or better)				
	Minimum 256GB (16x16 or 32x8 or better) ECC DDR4-2666 Mhz or better RAM in balanced				
	configuration for optimizing the memory bandwidth				
	2 x 1200 GB SAS Hot Swappable HDD 10000rpm with RAID-1 for OS (Hard disk: Hitachi Ultrastar, Western Digital or equivalent)				
	RAID controller with support for Hardware RAID 0, 1, 5, 6				
	2 x 1 Gbps Ethernet ports with PXE boot capability (including CAT6 cable for connecting to switch)				
	2 x 10 Gbps Ethernet ports (SFP+ ports with modules for connecting to switch)				
	2 x 100 Gbps High Speed InfiniBand(EDR)/ Omnipath HFI Interconnect or better				



	IPMI 2.0 or equivalent Support with KVM and Media over LAN features. Must include any licenses, if required for using these features Redundant Power Supply Rack mountable chassis with railings 80 Plus Platinum or better certified power supply. All required cables				
2	Compute Node	64 Nos. (10 core densi vendors fo	ty per n	ode quot	ted by
	2 x Intel Gold series, minimum 2.1 Ghz clock speed, minimum 16 Cores or above (Intel® Xeon® Processor 6130 or better) Minimum 128GB (16x8 or 32x4 or better) ECC DDR4-2666 Mhz or 4GB/Core RAM whichever is higher (in balanced configuration for optimizing the memory bandwidth) 1 x 1000 GB NL SAS or Enterprise SATA3 Hot Swappable HDD 7200rpm and a provision for second Hot Swappable HDD (Hard disk: Hitachi Ultrastar, Western Digital or equivalent) 1 x 1 Gbps Ethernet port with PXE boot capability (including CAT6 cable for connecting	vendors to	- a tota	101 2048	Cores
	to switch) 1 x 100 Gbps High Speed InfiniBand(EDR)/ Omnipath HFI Interconnect or better IPMI 2.0 or equivalent Support with KVM and Media over LAN features. Must include any licenses, if required for using these features Redundant Power Supply				
	80 Plus Platinum or better certified power supply. Form Factor: Half width 1U or equivalent (e.g. 4 servers in 2U) rack mountable Rack mountable chassis with railings All required cables				
Cluste	er Interconnect Switch				
3	All the Compute nodes & Master node are connected using a Infiniband(EDR)/Omnipath interconnect switch or equivalent. This configuration of the interconnect is as below Infiniband(EDR)/Omnipath 100 Gbps or	as required			

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	equivalent - Interconnect switches with redundant power supply. The switches should be configured in 3:1 blocking mode with minimum one core switch. Appropriate length & number of cables to be			
	provided for complete solution along with the rack mounting kit			
Warr	ranty			
4	OEM comprehensive onsite hardware warranty	5 yrs		
5	IEC C14 Male to IEC C13 Female power cables	as required		
6	All accessories as required to complete the cluster setup must be included in the Bill of Materials to constitute a complete quotation	as required		
Clust	ter Software	<u> </u>		
7	Preferred OS: Scientific Linux (latest version), CentOS (latest version) 64bit OS, and Debian (latest version)			
Centi	ralized IPMI manager:			
8	Centralised GUI-based software application to manage multiple IPMI targets	as required		
Optio	onal:			
9	Intel® Parallel Studio XE Cluster Edition for Linux* - Floating Academic 2sts (ESD) (with a free 2 day workshop on Software tools)	Option for 1 & 3 year		

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SPARES TO BE SUPPLIED:

- At least two hard disks of each type installed in compute node
- At least one power supply of each type installed in compute node
- At least four memory modules of each type installed in master/compute node
- At least one processor of the type installed in master/compute node
- At least one power supply of each type installed in master node

SERVICE LEVEL AGREEMENT:

- 1) In the event of a failure of any of the sub-systems or components of the proposed solution, the bidder has to ensure that the defects are rectified before end of the next working day.
- 2) Failure to meet the above requirement will result in extension of the warranty services by 3 days for delay of each day during the warranty period.
- 3) Therefore, the bidder along with the OEMs have to put systems and processes in place to address the above during the period of the contract.
- 4) Provide BTU and Power rating of the quoted hardware. Provide details of heat dissipation and cooling requirements



SCHEDULE OF EXPERIENCE OF LAST FIVE YEARS ANNEXURE – B (1)

Ref No: ICTS/TIFR/IT/2017-18/07

Please furnish list of firms/offices where you have undertaken similar jobs (please use additional sheets, if necessary :) two years.

Sl.	Name of the company	Name of	Purchase Order	Brief description	Value (Rs.)
No.	with full address	project	No. & date	•	, ,
Signa	ture				
21811					
Name)				
Desig	nation				
Name	e of company				
- 1002220	,				
Date					
Seal o	of the company				
Sour					



AUDITED ANNUAL TURNOVER ANNEXURE – B (2)

Sl.No.	Financial /Accounting Year	Profit (Rs.)	Loss (Rs.)	Annual Turnover (in Indian Rupees)
1.	2016-2017			
2.	2015-2016			
3.	2014 -2015			

AUTHORIZED SIGNATORY WITH SEAL

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N.B.

The right to suspend the NIQ/IIT process or part of the process, to accept or reject any or all NIQ/IITs at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by ICTS-TIFR without any obligation or liability whatsoever.



$\frac{SCHEDULE\ OF\ DEVIATION\ FROM\ SPECIFICATIONS/CONDITIONS}{ANNEXURE-C}$

Ref No: ICTS/TIFR/IT/2017-18/07

All deviations from the spe	cifications/conditions shall be filled in by the bidder in this schedule.
	es that the above mentioned are the only deviations from Technical ial terms and conditions of this tender. (State NIL if no deviation is
Signature	
Name	
Designation	
Name of the company	
Date	
Seal of the company	



Ref No: ICTS/TIFR/IT/2017-18/07

Checklist of documents for tender submission (Please mark Y/N for documents submitted)

Sl. No.	Cover 1 - Technical Bid	Y/N
1	Technical Bid tender document signed and sealed on every page	
2	Company profile & Organisation Structure	
3	Demand Draft/ Bank guarantee for EMD or Valid NSIC Certificate	
4	Authorisation letter from competent authority authorising the signatory to sign on behalf of the bidder	
5	Solvency Certificate	
6	Copy of PAN, Registration Certificate, GST Certificate	
7	Copies of audited financial reports - last 3 years	
8	Complete technical details of the product quoted for	
9	Details of warranty services	
10	Details of technical support bidder will provide in Bangalore	
11	CD/DVD containing all technical specifications of the product quoted for	
12	MAF Certificate & SPOC letter confirming Warranty and support directly from OEM	
13	BIS Certificate for IT related products	
14	ISO Certification of OEM & Bidder	
15	Copies of Purchase/ Work Orders of a similar contract executed or being executed in the last two financial years. • 1 Contract of 80% of tender value • 2 Contracts of 60% of tender value • 3 Contracts of 40% of tender value	
	Cover 2 - Financial Bid	
1	Price Bid - Quotes both Ex-works and CIF - in Annexure D(1) & D(2) with detailed break-up attached	



<u>ANNEXURE – D (1) - COVER – II PRICE BID</u> Supply & Installation of High Performance Computing Cluster (2048 cores)

Ref No: ICTS/TIFR/IT/2017-18/07

(Price in Ex-works)

Sl. No.	Item Description	Qty	Unit Price	Total Price
1	Master node	1 No.		
2	Compute Node	64 Nos. (16 cores socket) or as per core density per node quoted by vendors for a total of 2048 cores		
3	Cluster Interconnect Switch (Infiniband(EDR)/ Omnipath 100 Gbps or equivalent)	as required		
4	Hardware installation, warranty and support	5 years		
5	Additional Warranty for 6 th and 7 th year			
6	Centralized IPMI manager			
	Grand Total			

Optional but mandatory to quote		
Intel® Parallel Studio XE Cluster Edition for Linux* - Floating Academic 2sts (ESD) (with a free 2 day	Option for 1 year	
workshop on Software tools)	Option for 3 years	

Please enter Unit Price, Total Price and Grand Total in figures as well as words. Unit price and Total Price may be entered below each item.

Signature, Name, Address and	
Seal of the proprietor / Managing Partner etc	c.

Name:	Seal of the Company:
Designation:	
Signature:	Date:



workshop on Software tools)

PUBLIC TENDER NOTICE No. 23/DEC/2017

<u>ANNEXURE – D (2) - COVER – II PRICE BID</u> <u>Supply & Installation of High Performance Computing Cluster</u> (Price in CIF)

Ref No: ICTS/TIFR/IT/2017-18/07

Sl. No.	Item Description	Qty	Unit Price	Total Price
1	Master node	1 No.		
2	Compute Node	64 Nos. (16 cores socket) or as per core density per node quoted by vendors for a total of 2048 cores		
3	Cluster Interconnect Switch (Infiniband(EDR)/ Omnipath 100 Gbps or equivalent)	as required		
4	Hardware installation, warranty and support	5 years		
5	Additional Warranty for 6 th and 7 th year			
6	Centralized IPMI manager			
	Grand Total			
Optio	nal but mandatory to quote			
Editi	® Parallel Studio XE Cluster on for Linux* - Floating lemic 2sts (ESD) (with a free 2 da	Option for 1 year		

Please enter Unit Price, Total Price and Grand Total in figures as well as words. Unit price and Total Price may be entered below each item.

Option for 3 years

	Signature, Name, Address and Seal of the proprietor / Managing Partner etc.
Name : Designation:	Seal of the Company:
Signature :	Date: