



Date: 31/05/2019

INVITATION OF BIDS FOR PROCUREMENT OF HIGH-PERFORMANCE COMPUTING FACILITY

ENQUIRY NO: IITGOA/2019-20/010 DTD 31/05/2019

1. Quotations are invited in two bid system for the procurement of High-Performance Computing Facility in separate envelopes. Please mention the above-mentioned Title, Enquiry number and due date for submission of Bids on the sealed cover to avoid the Bid being declared invalid.
2. The address and contact numbers for sending Bids or seeking clarifications regarding this RFP are given below –
**Assistant Registrar
(Stores & Purchase)
IIT GOA, At GEC Campus,
Farmagudi, Ponda – Goa.
403401
ar_sp@iitgoa.ac.in**
3. This bid enquiry is divided into three parts as follows:
 - a. Part I – Contains General Information such as the time, place of submission and opening of tenders, Validity period of tenders, etc.
 - b. Part II – Contains Instructions for the Bidders and essential details of the items/services required, such as the Schedule of Requirements (SOR), Technical Specifications, Delivery Period, Place of Delivery and Consignee details.
 - c. Part III – Contains Price Bid format, other details etc.
4. This bid enquiry is being issued with no financial commitment and the Institute reserves the right to change or vary any part thereof at any stage and to withdraw it at any stage.

Contents

Part I – General information	3
Part II: Instructions to Bidders	6
Part III: Conditions of Contract	7
Annexure A - List of items required	11
Annexure A.1 – Technical Compliance Sheet	11
Annexure B – Eligibility Criteria	12
Annexure C - Specifications of High-Performance Computing Facility	14
Annexure D - Bidders Information	19
Annexure E - Price Bid Format (For Imported/INR Supplies)	20
Annexure F - Reasonability of Prices	22
Format For Performance Guarantee Bond	23
Undertaking by Principal Manufacturer(s)	24
Tender Acceptance Letter	25

Part I – General information

Tender No.	IITGOA/2019-20/010		
Tender Date	31.05.2019		
Tender Category	Goods		
Tender Type	Open		
No. of Envelopes	2		
Covers Information / Submission of Bids			
Cover No.	Cover Type	Description	Document Type
1	Technical	Technical Specification, Tender Document, EMD, Schedule of Requirement and Compliance, Bidders Information/Indian Agent Information, Previous Supply Order	.pdf
2	Financial	Financial Bid	.pdf
<p>Two Bid System:</p> <ul style="list-style-type: none"> ❖ The two-bid system will be followed for this tender. In this system bidder must submit their offer in separate sealed envelopes as – Technical Bid and Financial Bid. ❖ Separate technical bid and financial bid envelopes should be clearly marked as "Envelope No. 1 - Technical Bid" and "Envelope No. 2 - Financial Bid". ❖ Both these sealed covers are to be put in a bigger cover which should also be sealed and duly super scribed with our Tender No. & Due Date and to be submitted to the concern department/section mentioned in tender document. ❖ Bids should be forwarded by Bidders under their original memo / letter head inter alia furnishing details like GST number, Bank Details etc. and complete postal & e-mail address of their office. <p>Note:</p> <ul style="list-style-type: none"> • The technical offer should not contain any price information. If the price quoted is submitted in technical bid the tender will be rejected at the sole discretion of IIT Goa. • Initially Technical Bids will be opened and evaluated by the purchase committee. Financial Bid of only Technically qualified bidders will be opened later. • Contract/ Purchase Order will be awarded to the lowest bidder(L1) of Financial Bid among them. 			
Form of Contract	Supply		
EMD Fee Details (in the form of Demand Draft)			
EMD Fee INR:	Rs.7,00,000.00		

General Conditions of EMD:

a) Bidders are required to submit Earnest Money Deposit (EMD) for an amount of Rs 7,00,000/- along with their bids. The EMD may be submitted in the form of an Account Payee Demand Draft from any Public Sector Bank authorized to conduct government business favouring “Indian Institute of Technology Goa, payable at Goa”. Bids not accompanied by EMD will be rejected.

b) The EMD will be refunded to all the bidder other than the three lowest technically suitable bidder within one month from the date of opening of the Financial Bid (Cover – II). The EMD of the bidder whose offer is accepted will be refunded after successful delivery, commissioning, installation and acceptance report.

c) The EMD of the bidder who are not qualified under Cover – I will be refunded within one month from the date of return of their unopened cover – II.

d) Where a person whose tender has been received intimates that they are withdrawing their tender before the validity period or makes any modification in the terms and conditions of the tender which are not acceptable to IIT Goa, IIT Goa shall without prejudice to any other right or remedy, be at liberty to forfeit the Earnest Money deposited by such person absolutely. The EMD, without any interest, of the successful bidder would be returned after successful delivery, commissioning, installation and acceptance report.

e) Micro and Small Enterprises (MSEs) registered with National Small Industries Corporation are exempted from payment of Earnest Money Deposit. However, vendors covered under this category have to submit copy of registration certificate with present validity along with technical bid, failing which, the bid will be disqualified.

Bid Validity (Days):	180 days
Period of Work (Days):	90 days
Pre-Bid Meeting Date & Time:	07-06-2019 Time: 11:30 AM at IIT Goa (Prospective Bidders to send their queries via email to purchase@iitgoa.ac.in before the pre-bid meeting)
Pre-Bid Meeting Place & Address:	IIT, Goa
Modification and Withdrawal of Bids:	A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Buyer in writing about the clarifications sought at least 3 days before the pre-bid meeting. Copies of the query and clarification by the purchaser will be sent to all prospective bidders who have participated in the pre-bid meeting.
Clarification regarding contents of the tender document/RFP:	A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by the Buyer prior to deadline prescribed for submission of bids. A withdrawal notice may be sent by email but it should be followed by a signed confirmation copy to be sent by post and such signed confirmation should reach the purchaser not later than the deadline for submission of bids. No bid shall be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the period of bid validity specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of EMD
Rejection of bids:	Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected.

Unwillingness to quote:	Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be delisted for the given range of items as mentioned in this RFP.
Contract Type:	Tender
Delivery Location:	Indian Institute of Technology Goa Goa Engineering College Campus, Bhauasaheb Bandodkar Technical Education Complex, Veling, Farmagudi, Ponda, Goa
Pin Code:	403401
Bid Submission End Date/Date & Time Submission:	21.06.2019 at 17:00 Hrs
Place of Submission of Bid:	Stores & Purchase Department, IIT Goa, Admin Block, At GEC Campus, Farmagudi, Ponda, Goa-403401
Bid Opening Date & Time:	24.06.2019 at 15:00 hrs
Bid Opening Place:	IIT Goa, Admin Block, At GEC Campus, Farmagudi, Ponda, Goa-403401
Other Terms & Conditions:	As per mentioned in technical specification
Technical Clarification:	Name: Dr. Saumya Bajpai & Dr. Sharad Sinha Dept: IIT Goa Email: saumya@iitgoa.ac.in ; sharad@iitgoa.ac.in
Tender Inviting Authority:	Name: Assistant Registrar (S&P) Address: Stores & Purchase Department, IIT Goa, Admin Block, At GEC Campus, Farmagudi, Ponda, Goa - 403401
Signing Authority:	Assistant Registrar (S&P)

Part II: Instructions to Bidders

1. **Schedule of Requirements** – List of items are attached as **Annexure ‘A’**
2. **Eligibility Criteria:** Detailed as **Annexure ‘B’**
3. **Technical Details:** Technical details are attached in **Annexure ‘C’**
4. **Two-Bid System:** In respect of Two-bid system, Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any.

i) The Bidders are advised to submit the following documents along with Technical Bid –

- a) Compliance certificate in the following format;

Para of tender enquiry specification item-wise (As per annexure C)	Specification of Item offered	Compliance – whether YES/NO	In case of non-compliance, deviation to be specified in unambiguous terms

The offers must strictly be as per the specifications given in Annexure-C. At the same time, it must be kept in mind that mere copying of our specifications in the quotation shall not make the technical bid eligible for consideration. **A bid has to be supported with original catalogue (not photo copy) of the quoted model duly signed by the principals and the same must be sent along with the technical bid.** The quoted model should not become obsolete for a minimum period of 5 years (This is for the availability of spares). Therefore, the model quoted should invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance with above shall be treated as incomplete/ambiguous and the bid may be ignored without giving an opportunity to the bidder for further clarification/negotiation etc.

- b) Bidders & Indian Agent’s Information **Annexure ‘D’**.
 c) EMD
 d) All the documents required as per **Annexure ‘B’**
 e) Copy of unpriced commercial bid along with technical bid needs to be submitted

ii) The following documents should be submitted along with Financial Bid –

- a) Price Bid. (**Annexure E**)
 b) Previous order of supplies/Justification of quoted rates. (**Annexure F**)

5. **Delivery and Installation Period** – Supply and installation to be done within 90 days from the effective date of issuance of Purchase Order (In case of Dollars, supply should be done after LC opening). Please note that P.O. can be cancelled unilaterally by the Institute in case items are not received within the delivery period. Extension of delivery period will be at the sole discretion of the Institute, with applicability of LD clause.

6. **Delivery and Transportation** - Place for supply / installation is **‘Indian Institute of Technology Goa, Ponda – Goa’**.

Part III: Conditions of Contract

1. Award of Contract:

- i. IIT Goa shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated financial bid.
- ii. If more than one BIDDER happens to quote the same lowest price, IIT Goa reserves the right to award the contract to more than one BIDDER or any BIDDER.

2. Prices:

- i. The price quoted shall be considered firm and no price escalation will be permitted (except Govt. Statutory Levies).
- ii. Bidder should quote only one solution against the given technical specifications.
- iii. Bidder can quote in INR or in Foreign Currency. The bidder can quote partly in INR and partly in foreign currency. The authorized system integrator may bid on behalf of their server OEM abroad. In such case, the bidders must provide the details viz. name & address on whom the Supply Order/ Letter of Credit is to be placed/ established with bank/ account details etc. in their commercial bid. In such case the EMD and Performance Bank Guarantee must be provided by the bidder in INR.
- iv. The prices quoted must be on "all-inclusive till destination" basis. (In case of imports - DDP-port of landing + customs formalities/charges/levies + inland FFI till IIT, Goa / in case of INR – F.O.R. IIT, Goa). If IIT, Goa places import order in foreign currency directly on supplier abroad, the customs duty payable if any after availing exemption under customs notification no. 51/96 (amended 24/2007) will be paid extra (reimbursed) at actual on submission of documentary proofs/BoE etc. The Customs Duty Exemption Certificate will be issued by IIT, Goa. The Customs Duty Exemption Certificate will not be issued in cases where the order is placed in INR and / or on Indian entity.
- v. The bidder shall arrange to clear the consignment after following customs formalities and arrange to deliver the consignment at destination(s). The responsibility, cost and risk of the consignment shall rest with the bidder till receipt of goods is acknowledged by the IIT, Goa. However, such receipt/ acknowledgement shall not be treated as acceptance of goods.

3. Taxes and Duties

- i. The Exemption / Concession certificate towards Customs Duty and GST can be issued by IIT GOA, subject to fulfilment of necessary documentation formalities by the bidder. However, bidder has to quote price as per standard tariff rates. IIT GOA is eligible for partial customs duty exemption and IGST (Percentage depends on the item). While quoting, full tariff rate is to be quoted with HSN code.
- ii. If any demurrage is payable for delay in customs clearance of consignment beyond period of one week from date of landing and if the delay is for the reasons attributed to IIT GOA, the demurrage charges shall be paid by the bidder. The same shall be reimbursed by IIT GOA against submission of original document in support of payment of demurrage charges.
- iii. The bidder should take care to quote the exact rate of Taxes/ Duties. If due to any error/oversight, the rates of taxes/duties quoted are lower than the actual/applicable rates, the bidders will not be permitted to correct the errors. In this case, the difference if any between the quoted rates and the actual rates will be to the bidders account.
- iv. The supplier must provide the proper shipping documents necessary for customs clearance availing applicable duty exemption.

4. Comparison of Bids

- i. Only the short-listed bids from the technical evaluation shall be considered for commercial comparison.
- ii. For the purpose of comparison of prices on equal basis, the prices quoted in foreign currency (if any) by bidders shall be converted to equivalent Indian Rupees. The exchange rate as on the date of opening of financial bids shall be considered for the purpose of comparison

5. Warranty:

- i. The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The supplier further warrants that all Goods supplied under this contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the supplier. The warranty should be comprehensive on site, repair/replacement basis free of cost.
- ii. All the equipment and components supplied must have 3 (Three) years onsite comprehensive warranty with 24x7 support along with 4 hours response time and resolution time of Next Business Day resolution, covering all parts & labor starting from the date after the successful installation, demonstration of performances and acceptance by IIT Goa. During the warranty period, vendor will have to undertake comprehensive maintenance of the entire hardware components, equipment, support and accessories supplied by the vendor at the place of installation of the equipment.
- iii. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. It should be completed within Next Business Day resolution for entire solutions after the intimation of fault.
- iv. Goods requiring warranty replacements must be replaced on free of cost basis including updates and revision of system and HPC software as applicable
- v. IIT Goa reserves the right to invoke the Performance Bank Guarantee submitted by bidder, in case of the following:
 - a. The HPC Cluster Components/solutions fail to achieve the performance as stipulated in this document or
 - b. The bidder fails to provide the warranty and other services in scheduled time frame, as stipulated in this document or
 - c. The bidder delays to provide the warranty services as stipulated in this document.

6. Comprehensive Annual Maintenance Contract (AMC):

- i. The Supplier shall provide comprehensive annual maintenance services towards the system supplied for 4th, 5th and 6th Year after the warranty period of three years. The terms and condition of this AMC shall be same as given in Warranty clause.
- ii. The bidder shall quote AMC rates separately for 4th, 5th and 6th Year which shall be counted towards calculation of L1.
- iii. The AMC order may be released after the completion of the warranty for each subsequent year separately.

7. AMC Payments:

- i. The payment towards AMC charges shall be paid at end of each quarter on pro-rata basis.

8. Corrupt or Fraudulent Practices

- i. It is expected that the bidders who wish to bid for this project have highest standards of ethics.
- ii. IIT Goa will reject bid if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract;
- iii. IIT Goa may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award / execution of contract.
- iv. Redressal of grievances will be taken up at the end of the procurement process. Any correspondence pertaining to alleged wrongdoing to different authorities involved or having jurisdiction over the purchase prior to release of PO will be viewed as obstructive and the bidder is liable to be debarred from participating in the current or future procurement processes.

9. Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity/ dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Director, IIT Goa shall be final and binding on all parties.

10. Purchaser's Right to amend / cancel

- i. IIT Goa reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc.
- ii. IIT Goa reserves the right to cancel the entire tender without assigning any reasons thereof.

11. Pre-installation:

- i. The bidder may also mention the pre-installation requirements for the equipment like ambient temperature, humidity, civil work, weather specifications, power specifications, etc. When items are provided full performance satisfaction should be demonstrated.

12. Installation:

- i. Supplier shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty period and thereafter as mentioned in the contract.
- ii. Installation / demonstration to be arranged by the supplier free of cost and the same is to be done at site within the 90 days' work period.

13. Terms of Payment:

- i. For foreign currency payments: 80% of the payment will be made through irrevocable Letter of Credit (LC) with 30 days credit period. Balance 20 % payment shall be released by wire transfer within 30 days of demonstrating the benchmarks and completing the acceptance criteria as mentioned in the tender.
- ii. Payments towards installation and commissioning charges shall be released within 15 days from successful commissioning, installation and completion of acceptance tests.
- iii. The LC operating charges inside India will be to IIT, Goa account and those outside India will be to beneficiary account. The LC confirmation charges & LC amendment charges, if requested/ required, will be to beneficiary account.
- iv. For payments in INR: 80% of the payment will be released on receipt of material at IIT, Goa with 30 days credit. Balance 20% payment will be released within 30 days of demonstrating the benchmarks and completing the acceptance criteria.

14. Jurisdiction:

- i. All disputes, legal matters, court matters if any are subject to Goa jurisdiction only.

15. Penalty/ Liquidated Damages:

- i. Timely delivery is essence of the contract and hence if any consignment be delayed, liquidated damages at the rate 0.5% of the price of the delayed consignment, for each week or part whereof shall be levied and recovered subject to maximum of 5% of total purchase order value.
- ii. IIT Goa reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties if any will be recovered by forfeiting PBG at vendor's cost and risks.

16. Supervision of Erection and Commissioning:

- i. Successful BIDDER shall depute concerned specialist, for supervision of erection & commissioning of the machine to be carried out. The successful BIDDER shall make necessary arrangement at their own expenses for stay, transport and other expenses of their Specialist during their stay in Goa which also includes imparting free of cost training to IIT Goa personnel for two – three weeks.

17. BENCHMARK and ACCEPTANCE CRITERIA

Bidder need to submit the below benchmarks along with the bid and demonstrate the benchmark after the supply:

- i. Per Node Linpack Rmax performance of min. 70% of the theoretical peak value for the compute nodes
- ii. Per Node Linpack Rmax performance of min. 65% of the theoretical peak value for GPU compute nodes.
- iii. 5GB/s write throughput on Storage as mentioned in Storage Section

Note: Benchmark for single compute node should be performed in normal mode of execution (without over-clocking, turbo boost or any other special mode).

18. Force Majeure:

IIT, Goa may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the contract is the result of an Force Majeure. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.), acts of states / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

19. Arbitration:

All disputes/claims of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc. under this Contract, shall be referred by either party (IIT, Goa or the bidder) after issuance of 30 days' notice in writing to the other party clearly mentioning the nature of dispute to the Sole Arbitrator appointed by IIT, Goa. The venue for arbitration shall be specified in the purchase order/agreement. The arbitration proceedings shall be conducting in English and as per the provisions of Indian Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.

20. Risk and Ownership:

Upon 80% of payment, IIT, Goa shall become owners of goods ordered but all risks, responsibilities; liabilities thereof in all goods shall remain with selected bidder till delivery of all goods to all end users. Part deliveries shall not be treated as deliveries. Only full deliveries of all items ordered will be considered as delivery.

21. Indemnity:

Selected bidder shall save, indemnify and hold harmless IIT, Goa from any third-party Govt. Claims, losses penalties, if any, arising in connection with this Contract.

22. Assignment:

Selected bidder/ Party shall not assign, delegate or otherwise deal with any of its rights or obligation under this Contract without prior written permission of IIT, Goa.

23. Severability:

If any provision of this Contract is determined to be invalid or unenforceable, it will be deemed to be modified to the minimum extent necessary to be valid and enforceable. If it cannot be so modified, it will be deleted and the deletion will not affect the validity or enforceability of any other provision.

24. Performance Guarantee (GFR 2017 Rule 171):

- i. Performance Guarantee Bond is mandatory.
- ii. Successful tenderer/ bidder should submit performance guarantee as prescribed above to be sent to The Assistant Registrar, Stores & Purchase Department, IIT Goa on or before 15 days from the due date of issue of order acknowledgement. The PBG to be furnished in the form of bank guarantee as per proforma or annexure of the tender documents, for an amount covering 10% of the purchase order value.
- iii. The Performance Guarantee should be established in favour of "The Registrar, IIT Goa".
- iv. PBG to be established through any of the National Banks (whether situated at Goa or outstation) with a clause to enforce the same on their local branch of Goa or any scheduled bank (other than national bank) situated at Goa. Bonds issued by co-operative banks will not be accepted.
- v. Performance Guarantee Bond shall be for the due and faithfully performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded or agreed to between the successful tenderer and the purchaser under the terms & conditions of acceptance to the tender.
- vi. The successful tenderer is entirely responsible for due performance of the contract in letter and spirit and all other documents referred to in the acceptance of tenders.
- vii. The PBG shall be kept valid during the period of contract and shall continue to be enforceable for the warranty period.
- viii. For successful suppliers, if PBG is not submitted within 15 days from the date of Order Acknowledgement, then the Purchase Order will be cancelled with forfeiting of EMD.
- ix. **No interest shall be payable by the buyer to the Bidder on PBG.**

Annexure A - List of items required

Sl. No.	Description of Items	Qty
1	High Performance Computing (HPC) Facility	01 No.
1.1	Master Nodes	02
1.2	CPU Only Compute Nodes	16
1.3	GPU Node	01
1.4	Storage	01
1.5	Primary Communication Network	01
1.6	Secondary Communication Network	01
1.7	IPMI Communication Network	01
1.8	Other Charges, if any, required to complete the solution	-

Annexure A.1 – Technical Compliance Sheet

S.N o.	Item description & short specification	Copy and Paste in this column Technical Specs	Write your offering in this column	Write in this column deviations, if any
1.	Master Nodes			
2.	CPU only Compute Nodes			
3.	GPU node			
4.	Storage			
5.	Primary Communication Network			
6.	Secondary Communication Network			
7.	IPMI Communication Network			

Annexure B – Eligibility Criteria

The eligibility criteria for participation in bid are mentioned below:

1. The Bidder should be an Original Equipment Manufacturer (OEM) or its Authorized Dealer/Channel Partner having a Direct Purchase and Support agreement with the OEM. In case, the Bidder is a Dealer, a valid LETTER OF AUTHORIZATION from Original Equipment Manufacturer should be produced along with the bid (**Annexure D**).
2. In case the bidder is a System Integration Partner of the OEM, a certificate from the OEM clearly stating the relationship and level of partnership with the Partner and authorization to the Partner to quote for this specific tender enquiry is to be furnished.
3. A Certificate/Undertaking on the letter head of the Company to the effect that the OEM/bidder had not been blacklisted anywhere in India by any organization must be enclosed.
4. Bidder must have supplied and installed at least two HPC systems having peak compute power of min. 50 TF and at least one PFS based storage system of min. 50 TiB capacity in India. The purchase orders and their installation reports for these should be submitted and must be in the name of the bidder. The bidder must be the lead bidder for the submitted purchase orders and their installation reports.
5. The server OEM should have successfully installed minimum one (1) number of HPC Cluster having peak compute power of min 100TF of capacity in India in last 3 years. Documentary evidence (Installation Report) to this effect must be produced
6. List of Present Clientele to whom identical or similar equipment has been supplied in the preceding three years must be produced with contact addresses & telephone numbers.
7. Bidder must be in existence in the HPC business at least for the last five years. Documentary evidence to this effect must be produced along with technical bid.
8. The bidder must be a legal entity in India registered under appropriate laws. Registration certificate to this effect must be produced.
9. The bidder should have average annual sales turnover of Rs. 5 Crores or more during the last three financial years ending 31 March 2019. Attach firm's last 3 years audited profit and loss Account balance sheet duly audited by C.A. Documentary evidence to this effect must be produced along with financial bid.
10. Bidder should be registered under GST Act with concerned State Sales Tax Authorities. The bidder should furnish along with the bid document, the relevant GST Registration Document and PAN / TAN copies. Documentary evidence to this effect must be produced along with Technical bid.
11. The bidder/OEM must have registered/support office either in Goa, Karnataka, Maharashtra, Tamilnadu, Telangana with well-established Service Centre. Documentary evidence to this effect must be produced along with technical bid.
12. The OEM must have its own registered/support office in India. Documentary evidence to this effect must be produced along with technical bid.
13. The bidder should quote unit prices for every component. The prices can be in INR or in US Dollar. GST and any other applicable charges should be mentioned separately.
14. Period of validity of bids
 - i. Bids shall be valid for minimum 180 days from the date of submission. A bid valid for a shorter period shall stand rejected.

- ii. IIT, Goa may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. The bidder is free not to accept such request without forfeiting the EMD/BG. A bidder agreeing to the request for extension will not be permitted to modify his bid.

Additional criteria/clauses for successful bidding

1. Bidder should provide complete documentation about the Rack layout, power, cooling and electrical infrastructure required at IIT Goa along with the technical bid. Details of the cooling system must be accompanied by heat dissipation (in BTU) and max power consumption of each component.
2. Terms and conditions should be clearly mentioned in the technical bid. The deviations should be clearly stated with proper justifications with the signature of the responsible person.
3. The bidder should implement the entire solution in 90 days timeline after the award of tender. Any delay in delivery will have a penalty of 0.5 % of order value per week to total of 5% of order value. IIT Goa reserve the right to cancel the order if it is not deployed even after that. Delay due to IIT Goa will not be considered while computing total time of delay.
4. One free of charge re-location and re-commissioning of the HPC facility from the present GEC campus of IIT Goa to the permanent campus of IIT Goa should be provided within 6 years of purchase, should such a shifting be required by IIT Goa.
5. The bidder shall ensure that the bid submitted by him includes all equipment, hardware and software for full execution of contract to be awarded and cannot charge extra for additional hardware and software items required to meet the operational requirement at the installation and commissioning stage.
6. Any item not specifically mentioned in the tender document but essential in the opinion of the bidder for successful implementation of HPC solution, should be added with no change in commercial bid.
7. The bidder shall ensure that the bid submitted by him includes all equipment, hardware and software for full execution of contract. The bidder shall not charge extra for additional hardware and software items required to meet the operational requirement at the stage of installation and commissioning.
8. The bidder should agree to provide the following spares free of cost. Please attach a separate sheet in your technical bid agreeing for the same.
 - (A) 600 GB 10K RPM SAS Drive – One (1) unit
 - (B) 1 x 400GB SATA SSD with endurance of 3 DWPD for 5 years – One (1) unit
 - (C) 2TB or higher capacity 7.2K RPM Enterprise SATA or NL-SAS disks – One (1) unit
 - (D) IEC 14 Type Power Cables – Two (2) units
 - (E) 192 GB DDR4 RAM with minimum 2666MHz ECC Memory – Two (2) units

NOTE: Bidder needs to provide the compliance sheet for Annexure B in tabular format for each point mentioned above

The above-mentioned basic eligibility conditions and additional clauses are broad guidelines for pre-qualification and the Director, IIT Goa hereby reserves the right to relax/alter/modify/add any or all the conditions.

Annexure C - Specifications of High-Performance Computing Facility

1. SERVER, STORAGE AND NETWORKING COMPONENTS FOR HPC SYSTEM

Entire HPC solution should fit within a single 42U Rack.

Sl. no.	Items	Description
1.1	Master Nodes	
1.1.1	Master Nodes – 02 Numbers They must have same processor as quoted in compute nodes.	
1.1.2	Processor	Dual CPU based server must adhere to below points: <ol style="list-style-type: none"> a. Latest generation processor b. Minimum 20 cores per processor c. Specrate2017_fp_base >= 190 d. Specrate2017_int_base >= 200 e. Native support of AVX2 instructions f. Stream Triad benchmark >=180 GB/sec with memory proposed for node g. Minimum clock frequency of CPU 2.5 GHz. h. SPEC published numbers with Turbo ON and HT Enabled is to be quoted
1.1.3	RAM	Minimum 192 GB DDR4 with minimum 2666MHz ECC Memory
1.1.4	Network	4 x 1Gbps Ethernet ports with PXE boot compatibility
1.1.5	Remote Management	Dedicated remote management port, IPMI 2.0 or equivalent support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management
1.1.6	HPC Interconnect NIC	Single port 100 Gbps Infiniband EDR HCA
1.1.7	DVD	One number DVD RW/DVD combo (internal or external)
1.1.8	HDD	6 x 600GB 10K RPM SAS drives and with Support for Hardware RAID 0, 1, 10, 5 and 50
1.1.9	OS support	Fully certified/compatible with RHEL (7.x or later)
1.1.10	Power supply	Redundant and Hot Pluggable, 80 Plus Platinum or better certified power supply along with IEC 14 type Power cables
1.1.11	Form Factor	2U rack mountable or smaller form factor, compatible with standard 19" 42U Rack PDU
1.1.12	Graphics	On-board graphics support
1.2	CPU only Compute Nodes	

1.2.1	CPU only Compute Nodes – 16 numbers	
1.2.2	Processor	Dual CPU based server must adhere to below points: a. Latest generation processor b. Minimum 20 cores per processor c. Specrate2017_fp_base >= 190 d. Specrate2017_int_base >= 200 e. Native support of AVX2 instructions f. Stream Triad benchmark >=180 GB/sec with memory proposed for node g. Minimum clock frequency of CPU 2.5 GHz. a. SPEC published numbers with Turbo ON and HT Enabled is to be quoted
1.2.3	RAM	Minimum 192 GB DDR4 with minimum 2666MHz ECC Memory
1.2.4	Network	Two 1GbE network port with PXE boot capability
1.2.5	HPC Interconnect NIC	Single port 100 Gbps Infiniband EDR HCA
1.2.6	HDD	1 x 400GB SATA SSD with endurance of 3 DWPD for 5 years
1.2.7	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.
1.2.8	OS support	Fully certified/compatible with latest RHEL 7.x or latest
1.2.9	Power supply	80 Plus Platinum or better certified power supply along with at least N+1 redundancy at chassis/node level with required power cables (IEC 14 type).
1.2.10	Form Factor	0.5U or equivalent or smaller form factor (e.g. 4 servers in 2U) rack mountable
1.3	GPU node	
1.3.1	GPU node – 01 number	
1.3.2	Processor	Dual CPU based server must adhere to below points: a. Latest generation processor b. Minimum 20 cores per processor c. Specrate2017_fp_base >= 190 d. Specrate2017_int_base >= 200 e. Native support of AVX2 instructions f. Stream Triad benchmark >=180 GB/sec with memory proposed for node g. Minimum clock frequency of CPU 2.5 GHz.

		h. SPEC published numbers with Turbo ON and HT Enabled is to be quoted
1.3.3	RAM	Minimum 192 GB DDR4 with minimum 2666MHz ECC Memory
1.3.4	GPU	2 x NVIDIA Tesla V100 based on x16 (electrical) PCIe Gen3 (32GB HBM2) and a possibility of adding at least two additional cards (Future Expansion).
1.3.5	Network	Two 1GbE network port with PXE boot capability
1.3.6	HPC Interconnect NIC	Single port 100 Gbps EDR HCA
1.3.7	HDD	1 x 400GB SATA SSD with endurance of 3 DWPD for 5 years
1.3.8	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.
1.3.9	OS support	Fully certified/compatible with latest RHEL 7.x or latest
1.3.10	Power supply	80 Plus Platinum redundant power supply
1.3.11	Form Factor	4U or better form factor
1.4	Monitor, keyboard and Mouse – 1 Qty	2U or better rack mountable 17” LCD Monitor console, with integrated Keyboard and Mouse
1.5	Storage – 1 Qty.	
1.5.1	Capacity	PFS based 200 TiB usable capacity with RAID 6 (8+2) or equivalent with dual parity, with 4 GB/s write throughput performance. It must be configured with 7.2K RPM or better SAS/NL-SAS Disks. Metadata capacity to accommodate 300 million files. Read performance should not be less than write. Meta Data Space should be based on 10K/15K RPM SAS or SSD Disks.
1.5.2	File-system	Parallel file system should be OEM supported Luster 2.x or GPFS. Lustre Should be supported by Lustre OEM or Storage OEM.
1.5.3	Disks	Must be configured with 2TB or higher capacity 7.2K RPM Enterprise SATA or NL-SAS disks.
1.5.4	Global Hot Spare	Disks amounting to 2% of total capacity need to be additionally provided as Global Hot spare.
1.5.5	Management	Storage system must have a management and monitoring console for RAID and file system monitoring.
1.5.6	I/O server	Must contain Two metadata servers, if required and required number of OSS servers to achieve the benchmark. I/O servers (MDS/OSS) should have 100Gbps interface compatible with quoted primary interconnect and adhere to specification mentioned in HPC interconnect section Necessary HBA cards/cables to connect Storage controller

1.5.7	Connectivity	Connectivity between Storage servers to Storage enclosures with Redundant Connects & Links
1.5.8	Fail-over	The file system should be accessible even if one of the MDS or OSS nodes (if required) fails. Storage should be scalable up to double the usable capacity under single file system.
1.5.9	High-Availability	The solution should be highly available. Storage subsystem should be configured with no Single Point of Failure (SPOF) including I/O servers, Metadata servers, Storage array, HBA Cards and power supply. Fan modules, Power supply should be redundant and hot pluggable/replaceable.
1.5.10	Benchmarks	<p>Benchmark:</p> <ol style="list-style-type: none"> 1. Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after installation. 2. Open-source IOR benchmarks running on compute nodes with 1 MB block size and file size double than total storage cache and I/O node memory. 3. Benchmarks must be run on compute nodes where each node is writing to same shared file as well as each node writing to separate unique file. Bidder must submit storage benchmark results along with tender response.
1.5.11	Depth	Should not exceed 1000mm including cable guides/trays.
1.5.12	Deployment/Integration	Bidder need to integrate, configure and install the complete storage solution and demonstrate the above benchmarks
1.6	Primary Communication Network	
1.6.1	Switch – 01 number	
1.6.2	Switch	36 port EDR InfiniBand switch with 100% non-blocking
1.6.3	Management	Support for Out-of-band management based on RJ45 1G management port with Built-in Fabric Manager
1.6.4	Cables	Required number of appropriate lengths along with 2 spare cables should be provided
1.6.5	Power Supply	Redundant power supply
1.6.6	Power cables	IEC 14 type Power cables
1.6.7	Mounting Kit	Rack mounting kit if required
1.7	Secondary Communication Network	
1.7.1	Switch – 01 number	

1.7.2	Ethernet Switch	Managed 48 port Gigabit Ethernet switch
1.7.3	Cables	Required number of appropriate lengths along with 5 spare cables should be provided
1.7.4	Power cables	IEC 14 type power cables
1.8	IPMI Communication Network	
1.8.1	Switch – 01 number	
1.8.2	Ethernet Switch	48 port Gigabit Ethernet switch
1.8.3	Cables	Required number of appropriate lengths along with 5 spare cables should be provided
1.8.4	Power cables	IEC 14 type power cables

NOTE: Bidder must submit compliance sheet as mentioned in Annexure A.1

SCOPE OF WORK

- 1 Racking, stacking and cabling of the supplied hardware
- 2 Installation and commissioning of Storage subsystem and demonstration of 5GB/s write throughput
- 3 Running of HPL benchmark/Any other compute intensive load for 24 hr on entire cluster for verifying the reliability.
- 4 Bidder should provide the total cooling and power rating of the quoted hardware.
- 5 Documentation and Manuals of all systems to be supplied.
- 6 3-year standard warranty and AMC

(To be printed on letterhead of the bidder)

Annexure D - Bidders Information

1.	Name of the Bidder	
2.	Address of the Bidder	
3.	PAN No.	
4.	GSTN No.	
5.	State of GST Registration	
6.	E-mail	
7.	Contact Person's Name & Designation	
8.	Mobile No.	

Indian Agent's Information

1.	Name of Indian Agent	
2.	Address of Indian Agent	
3.	Indian Agent PAN No.	
4.	Indian Agent GSTN No.	
5.	State of GST Registration	
6.	E-mail	
7.	Contact Person's Name & Designation	
8.	Mobile No.	

(To be printed on letterhead of the bidder)

Annexure E - PRICE BID FORMAT (For Imported/INR Supplies)

S.No.	Item description & short specification	HSN Code/ SAC Code	Qty in Units	GST%	Unit Price	Total Bid Price
1.	Master Nodes					
2.	CPU only Compute Nodes					
3.	GPU node					
4.	Storage					
5.	Primary Communication Network					
6.	Secondary Communication Network					
7.	IPMI Communication Network					
8.	Installation and Commissioning Charges (if any, quote in INR)					
9.	Other Charges if any, required to complete the solution (please specify)					
Grand Total						

Total Price in Words (Currency):

Total Price in Words (INR):

#HSN Code: "Harmonized System of Nomenclature Code No." and SAC Code: "Service Accounting Codes Code No."

1. Delivery Period: days
2. Validity of the bid: 180 days from the date of submission of quotation/tender.
3. Mode of Shipment:
4. Port of Shipment:

Signature.....

Name

Place: Company Name & Address:

Date: Affix Rubber Stamp:

Note:

- 1) The applicable exact rates of Taxes will be added as per above columns.
- 2) In case of any mistake or error in calculations or any discrepancy in price quoted in word and figures, the LOWEST amount will be considered for comparison. If this lowest price is not acceptable to the bidder, their bid will be rejected.
- 3) Commercial bids must be offered in the format above.

AMC Charges to be Quoted in INR Only

Sr. No	Name and Specification of the Item	Unit	Unit Price	Qty	GST or Duty - %	GST/ Duty Amount	Total
1.	AMC Charges for 4 th Year for HPC system and software if any	Year	Rs.	1			
2.	AMC Charges for 5 th Year for HPC system and software if any	Year	Rs.	1			
3.	AMC Charges for 6 th Year for HPC system and software if any	Year	Rs.	1			

#HSN Code: "Harmonized System of Nomenclature Code No." and SAC Code: "Service Accounting Codes Code No."

1. Delivery Mode: Delivery at IIT Goa, at site only.
2. Terms of payment: As mentioned in tender document
3. Validity of the bid: 180 days from the date of submission of quotation/tender.

Place: Signature.....
 Name
 Company Name & Address:

Date: Affix Rubber Stamp:

Note:

- 1) The applicable exact rates of Taxes will be added as per above columns.
- 2) In case of any mistake or error in calculations or any discrepancy in price quoted in word and figures, the LOWEST amount will be considered for comparison. If this lowest price is not acceptable to the bidder, their bid will be rejected.
- 3) Commercial bids must be offered in the format above.

Annexure F - Reasonability of Prices

Please quote best minimum prices applicable for a premier Educational and Research Institution. The party must give details of at least two purchase orders identical or similar equipment, supplied to any IITS/Research Institutions/ other organisation as per below Format (to be enclosed in Technical Bid) along with the final price paid and details are mandatory.

Previous Supply Orders

Name of the Firm _____

Sr. No.	PO No. & Date	Description & Quantity of ordered equipment	Value of Order	Date of completion of delivery as per contract	Remarks indicating reasons for late delivery, if any and justification of price difference of their supply order & those quoted to us	Has the equipment being installed satisfactorily (attach a certificate from the Purchaser/ Consigner)	Contact Person along with Telephone no., Fax No. and e-mail address

Place: _____

Date: _____

Signature and Seal of the Manufacturer / Bidder

FORMAT FOR PERFORMANCE GUARANTEE BOND

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT GOA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GOA OR ANY SCHEDULED BANK SITUATED AT GOA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.

To,
The Registrar,
Indian Institute of Technology, Goa
Farmagudi, Ponda,
Goa – 403401

LETTER OF GUARANTEE

WHEREAS Indian Institute of Technology, Goa (Buyer) have invited Tenders vide Tender No..... Dt. for purchase of

AND

WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment / machinery, etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of “**Registrar, Indian Institute of Technology, Goa**” in the form of Bank Guarantee for Rs (**10% (ten percent) of the purchase value**) and valid till **up to warranty period** from the date of issue of Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of Order Acknowledgment as a successful bidder.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology, Goa on demand and without protest or demur Rs..... (Rupees.....).

This Bank further agrees that the decision of Indian Institute of Technology, Goa (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We, (name of the Bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the Tenderer (Seller) and/ or Indian Institute of Technology, Goa (Buyer).

Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed Rs. (Indian Rupees only).
2. This Bank Guarantee shall be valid up to(date) and
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Goa serve upon us a written claim or demand on or before (date).
4. This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at situated at (Address of local branch).

Date:

Yours truly,
Signature and seal of the Guarantor:

Name of Bank:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.

Undertaking by Principal Manufacturer(s)

(To be submitted in Original on Letterhead-For Nodes + Communication Network +
Storage- separately)

Date:

To,
The Registrar,
Indian Institute of Technology, Goa
Farmagudi, Ponda,
Goa – 403401

Subject: Undertaking by Principal Manufacturer against tender no. IITGOA/2019-20/010 dtd. 31/05/2019 for Supply, Installation & Commissioning of HP Clusters with Storage etc. at IIT GOA.

Dear Sir,

We, M/s _____ (*Name of the manufacturer*) having registered office at _____ (*address of the manufacturer*) by virtue of being manufacturer for _____ (*Name of the product/s*), hereby authorise M/s _____ (*Name of the bidder*) having their office at _____ (*Address of bidder*) to submit quote, supply, install and provide after sales support for our range of products quoted by them to meet the above mentioned tender requirements.

M/s _____ (*Name of the manufacturer*) within the scope of requirement as per the tender mentioned above undertake to provide technical & other support towards fulfilling the requirements of installation, commissioning, benchmarking, acceptance criteria and product warranty services of the HPC components to be supplied and installed at IIT Goa by our authorised representative M/s. (*Name of bidder*) against said tender.

The undersigned is authorised to issue such authorisation on behalf of M/s _____ (*Name of the manufacturer*).

For M/s _____ (*Name of the manufacturer*)

Signature & company seal

Name

Designation

Email

Mobile No.

TENDER ACCEPTANCE LETTER

(To be submitted on Company Letter Head).

Date:

To:
The Registrar,
Indian Institute of Technology, Goa
Farmagudi, Ponda,
Goa – 403401

SUB: Acceptance of Terms & Conditions of Tender.

Tender Reference No: IITGOA/2019-20/010 dtd. 31/05/2019.

Name of Tender / Work: Supply, Installation & Commissioning of HP Cluster with Storage etc. at IIT Goa

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: www.iitgoa.in / www.eprocure.gov.in etc.; as per your NIT / advertisement, given in the above-mentioned website(s).
2. I / We hereby certify that I / We have read the entire terms and conditions of the tender documents from Page No.1 to 25 (including all documents like annexure(s), schedules(s), etc.), which form part of the contract agreement and I / We shall abide hereby by the terms / conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(S) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department/Public sector undertaking.
6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the fully said earnest money deposit absolutely.

Yours Faithfully,

Authorized Signatory.
(Signature of the Bidder, with Official Seal)
Email id for correspondence.