

Centre for Industrial Consultancy and Sponsored Research (IC & SR)

IIT Madras

INVITATION FOR BID

For and on behalf of IC & SR, IIT Madras, sealed tenders are invited Single Part Tender System for the following work being executed by IIT Madras:-

1)	Description:	<p>Procurement of HPC Cluster - 10 T flops & Graphics card for National Technology Centre for Ports, Waterways and Coasts (NTCPWC).</p> <p>The tenderer should quote firm price.</p> <p>(Detailed scope of work as mentioned under Section-III of this specification).</p>
2)	Specification No.	OED/NTCPWC/HPC/2018/02
3)	Earnest Money Deposit:	<p>Rs. 1,00,000/- (Rupees one lakh only) in the form of DD in favour of The Registrar, IIT Madras, Chennai issued by any Nationalized bank. The amount should be given with Technical bid only. If it is not attached with technical bid the tender is summarily rejected.</p> <p>If the contractor/ Tenderer fails to undertake the above work after issuance of purchase order the EMD should be forfeited without making any correspondence or reference to the tenderer.</p>
4)	Performance Bank Guarantee	<p>The selected tenderer must give five percentage of their quoted value as Performance Bank Guarantee up to warranty period after issue of the purchase order. The bank guarantee should only be obtained from any Nationalized / scheduled banks, no foreign banks; private banks guarantee will be accepted. A letter of undertaking has to be attached along with the tender regarding the</p>

		above in the company's letter head duly signed by the authorized signatory of the company / firm.
5)	Last date for Submission of Bid:	16.00 Hrs. IST on 14.06.2018
6)	Date & Place of Opening of Tender (Techno commercial bid):	16.15 Hrs. IST on 18.06.2018 Rm.005, Ground Floor, Department of Ocean Engineering, IIT Madras, Chennai 600036 If the due date happens to be a holiday, the tender will be received & opened on the next working day.
7)	Validity of offer:	90 days from the date of opening.
8)	Method of submission of tender:	Two cover system
9)	Clarification to be obtained from:	Dr. V.Sriram, Asst. Professor, Department of Ocean Engineering IIT Madras, CHENNAI - 600 036 TAMIL NADU Phone no.: 044- 2257 4813 vsriram@iitm.ac.in
10)	Cost of Tender specification	Nil
11)	Tender Inviting Authority:	Shri. V.Sathyanarayan, Senior Manager, Project Purchase Section, IC & SR, IIT Madras Chennai- 600 036.

INDEX

Sl.No.	DESCRIPTION	Page No.
	SECTION – I - INSTRUCTION TO BIDDERS	
1.	GENERAL and SCOPE OF WORK	1
2.	SPECIFICATION NUMBER	1
3.	EARNEST MONEY DEPOSIT	1
4.	PERFORMANCE BANK GUARANTEE	1
5.	SCHEDULE FOR RECEIPT & OPENING OF BID	1
6.	SUBMISSION OF TENDER	2
7.	OPENING OF TENDER	2
8.	TENDER INVITING AUTHORITY	2
	SECTION – II - COMMERCIAL TERMS AND CONDITIONS	
1.	GENERAL	3
2.	COMPLETENESS OF TENDER	3
3.	PRICE	3
4.	DELIVERY TERMS AND CONDITIONS	3
5.	VALIDITY OF TENDERS	3
6.	PAYMENT TERMS	4
7.	FORCE MAJEURE	4
8.	TAXES	5
9.	JURISDICTION FOR LEGAL PROCEEDINGS	5
10.	ARBITRATION	6
11.	DEVIATIONS OF TENDER	6

12.	IC & SR RESERVE THE RIGHT	6
13.	EVALUATION AND COMPARISON OF TENDER OFFERS	7
	SECTION - III - TECHNICAL SPECIFICATION	
1.	SCOPE OF SERVICES	8-10
2.	SCHEDULE OF FEES	11
3.	ANNEXURE I (UNDERTAKING FOR LEGAL PROCEEDINGS	12-13

SECTION - I
INSTRUCTION TO BIDDERS

1.1 General and Scope of work

Separate sealed competitive bid under "Two cover system" is invited in the following works.

- i) Procurement of HPC Cluster - 10 T flops & Graphics card for National Technology Centre for Ports, Waterways and Coasts (NTPWC).

(Detailed scope of work as mentioned under Section-III of this specification).

1.2.1 Specification No: OED/NTPWC/HPC/2018/02.

1.2.2 Cost of Tender Specification: Waived

- 1.3 EARNEST MONEY DEPOSIT (EMD):** Rs. 1,00,000/- (Rupees one lakh only) in the form of DD in favour of The Registrar, IIT Madras, Chennai issued by any Nationalized bank. The amount should be given with Technical bid only. If it is not attached with technical bid the tender is summarily rejected.

If the contractor/ Tenderer fails to supply the above item after issuance of purchase order the EMD should be forfeited without making any correspondence or reference to the tenderer.

1.4 PERFORMANCE BANK GUARANTEE:

The selected tenderer must give **five percentage** of their quoted value as Performance Bank Guarantee up to warranty period after issue of the purchase order. The bank guarantee should only be obtained from any Nationalized / scheduled banks, no foreign banks; private banks guarantee will be accepted. A letter of undertaking has to be attached along with the tender regarding the above in the company's letter head duly signed by the authorized signatory of the company / firm.

1.5 SCHEDULES FOR RECEIPT AND OPENING OF BID:

- a) Last date and time for receipt of bids : **16.00 Hrs. IST on 14.06.2018**
b) Date and time for opening of bids : **16.15 Hrs. IST on 18.06.2018**

1.6 SUBMISSION OF TENDER:

Tender should be furnished in sealed cover, super-scribed as “Procurement of HPC Cluster - 10 T flops & Graphics card for National Technology Centre for Ports, Waterways and Coasts (NTCPWC)”.

The offer should be addressed to:

Shri. V.Sathyanarayanan
Senior Manager, Project Purchase Section,
IC & SR, IIT Madras,
Chennai- 600 036

- 1.6.1** The Bidders have the option of sending the bid by Registered post, Courier or submitting the bid in person, so as to ensure that the bids are received in the specified office of the Purchaser, by the date and time indicated in the Sl.No.1.5 above. Bids submitted by Telex/ Fax/ Telegram/e-mail etc. will not be accepted.

1.7 OPENING OF TENDER

The tenders will be opened at **Rm.005, Ground Floor, Department of Ocean Engineering, IIT Madras** on the due date and time prescribed in the presence of such of those tenderers who may desire to be present. If the due date for tender opening happens to be a holiday, the tenders will be opened on the next working day.

The individuals attending the opening of tenders should be duly authorized by the participating firms in the tender. **No late / delayed tender can be accepted after closing of the tender box.**

If the tenderer has any doubt about the meaning of any portion of this specification, he may address the Tender Inviting authority which should reach at least one week before opening of this tender. Any clarification received after this date will not be entertained.

1.8 TENDER INVITING AUTHORITY

Shri. V.Sathyanarayanan
Senior Manager, Project Purchase Section,
IC & SR, IIT Madras,
Chennai- 600 036.

SECTION – II

COMMERCIAL AND TECHNICAL CONDITIONS

2.1 GENERAL

The scope of services shall be as detailed in Section - III of this specification.

2.2 COMPLETENESS OF TENDER

The tender should be complete in all aspects. The tenderer shall furnish all relevant details called for in the specification with supporting documents with necessary latest brochure of the HPC cluster with detailed specification wherever required for considerations by IC & SR. The tenders not containing the complete details as requested in the specification are liable for rejection.

2.3 PRICES

Tenderers shall quote FIRM Price only. Shall quote price separately for each item in the respective schedule as prescribed in the specification.

OEM can also be participated in this tender or they may give authentication letter to their representative along with letter of authority to participate in the tender.

2.4 DELIVERY TERMS AND CONDITIONS

The intending tenderer must specifically quote the delivery terms and the items tendered must invariably be delivered at Department of Ocean Engineering, IIT Madras, Ex-Godown / Workshop / Manufacturing unit will not be considered for comparative purposes under any circumstances and administration has the right or to accept or reject this type of tender.

2.5 VALIDITY OF TENDERS

Tenders should be valid for acceptance for a period of at least **Ninety (90) days** from the date of tender opening. In case any bidder quotes a lower validity period than that called for, his offer shall be liable for rejection. In exceptional circumstances, the purchaser may solicit the bidder's consent to an extension of the period of the validity. The request and response thereto shall be made in writing (including fax or telex).

2.6 PAYMENT TERMS

Under any circumstances no advance payment will be provided, following is the schedule of payment.

- 1. Payment against delivery = 70 %**
- 2. After successful installation = 30 %**

In case of import, IITM is eligible for concessional custom duty and exemption of IGST. In case of INR purchase concessional GST of 5 % may be levied, since IITM is an educational institution. Necessary certificate will be provided along with the purchase order.

2.6.2 Payment will be made by Bank transfer on any one of the commercial banks or their branches in India as may be decided by IC & SR from time to time. Bank details with complete account number, Name of the branch, IFSC code and MICR Code should be provided along with the tender document also in the invoice. The invoice must be submitted in triplicate, Pre- receipted.

2.6.3 Offers agreeing to the above terms of payment will be preferred. IC & SR may reject the offers with other terms of payment.

2.7 FORCE MAJEURE

Neither the Contractor nor the Purchaser shall be considered in default in performance of its obligations hereunder if such performance is prevented or delayed for any causes beyond the reasonable control of the party affected, such as war, hostilities , revolution, riot, civil commotion, epidemic, major fires, explosions, floods, earthquakes or because of any law, order, proclamatory regulations or ordinance of Government or because of any act of God, provided notice in writing of such cause with necessary evidence that the obligation under the Contract is thereby affected or prevented or delayed, is given within 14 days from the happening of the event and in any case it is not possible to serve the notice within 14 days period, then within the shortest possible period without delay. In case the force majeure conditions prolong beyond a continuous period of 6 months, the Purchaser shall be entitled to decide the further course of action including revisions in the terms of Contract, if any.

2.7.1 As soon as the cause of Force Majeure has been removed, the party whose to perform its obligation has been affected shall notify the other party the actual delay occurred on account of such activities.

2.7.2 Although the time for completion of work shall be suitably extended (not exceeding the period during which the work was stopped on account of Force Majeure clause), such extension shall not result in any financial claim by the Contractor against the Purchaser or any account of such a delay for any other reason whatsoever.

2.8 TAXES

The price quoted shall be firm and **shall be inclusive of all statutory levies and taxes including taxes as applicable (Narration regarding the concessional tax has already defined in Para 2.6). Necessary income tax will be deducted at source** on each bill as per the regulations in force. If the Institution is exempted from payment of income tax, the documentary evidence for the same has to be furnished.

2.9 JURISDICTION FOR LEGAL PROCEEDINGS

No suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in a Court Save in the City Civil Court of Chennai or the Courts of Small Causes at Chennai. It is agreed that no other courts shall have jurisdiction to entertain any suit or proceedings even though part of the cause of action might arise within their jurisdiction. In case any part of cause of action arises within the jurisdiction of any of the courts in Tamil Nadu and not in the courts in the Chennai City, it is agreed to between the parties that such suits or proceedings shall be instituted in a court within Tamil Nadu and no other court outside Tamil Nadu shall have jurisdiction, even though any part of the cause of action might arise within the jurisdiction of such courts.

The bidders shall furnish an undertaking in a non-judicial stamp paper of value Rs.100/- agreeing to the above condition as per schedule furnished in Annexure-II. This should be given after issuing the work order – This is applicable for selected L1 bidder.

2.10 ARBITRATION

Arbitration is not applicable to this contract.

2.11 DEVIATIONS IN TENDER

Offers which conform to the specification without any deviation will be preferred. If the tenderer wants to deviate from any of the terms and conditions, the same shall be mentioned clearly.

2.12 IC & SR BOARD RESERVES THE RIGHT

- I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
- To relax or waive any of the conditions stipulated in the tender specification as deemed necessary in the best interest of the project for good and sufficient reasons.
- To revise the quantum of works/completion period of work of any or all the items covered by this enquiry during the pendency of contract and to terminate the contract in between the agreed stipulated period.

The tenderers should clearly indicate their acceptance or otherwise to the following terms and conditions.

- Specific acceptance of Board's terms of payment.
- Board's terms of Liquidated damages for delay in completion of work.
- Validity of tender.

If no indication is given by the tenderer in his offer, it is presumed that the tenderer is agreeable to the terms and conditions of IC & SR mentioned in the specification.

All information in the bid shall be in ENGLISH only. All corrections, over typing etc. in the tender should be attested.

Tenderers are advised to post sufficiently early so as to ensure that the tenders reach this office in time. Tenders though posted in time but delayed in transit by post will not be considered, if received after the due date and time.

2.13 EVALUATION AND COMPARISON OF TENDER OFFERS

- a) The evaluation of the Tender will be done as per IIT Madras guidelines IC & SR.
- b) The evaluation shall include contract value of works with applicable sales/service tax, etc.,
- c) In case of discrepancy between the prices quoted in words and in figures, the lower of the two shall be considered.

SECTION – III

DETAILED SPECIFICATION

“Procurement of HPC Cluster - 10 T flops & Graphics card for National Technology Centre for Ports, Waterways and Coasts (NTCPWC)”.

Specifications for HPC Cluster

S. No	Parameters	Values or Notes
<u>Master/Head Node: Quantity 1</u>		
1	Processor	2 x Intel Skylake 6126 12C/24T 2.6G 19.25M 10.4GT UPI
2	Memory	4x 16GB DDR4 Reg. ECC 2666MHz; Minimum 16 DIMM slots required
3	Internal Storage	5 x 3TB SATA 7.2K RPM 3.5”; Minimum 8 x 3.5” hot-swap SAS/SATA drive bay required
4	RAID	On-board/AOC RAID Controller supporting RAID 0, 1, 5, 6, 10, 50 & 60 with 2GB cache
5	PCI Slot	4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8 slots
6	I/O Ports	Single-Port FDR 56Gb/s InfiniBand Adapter and 2M InfiniBand cable 2x Gigabit Ethernet Port Dedicated Port for IPMI/management 1x VGA & at least 4x USB 3.0 ports
7	Power Supply	Redundant Power Supply Titanium (96%)
8	Warranty	3 years on-site comprehensive warranty

<u>Compute Nodes: Quantity 4No’s</u>		
1	Processor	2 x Intel Skylake 6126 12C/24T 2.6G 19.25M 10.4GT UPI
2	Memory	4x 16GB DDR4 Reg. ECC 2666MHz; total 16 DIMM slots required
3	Internal Storage	1x 1TB SATA 7.2K RPM 3.5” HDD, Maximum support up to 3 Hot-swap 3.5” SATA3 drive bays

4	PCI Slot	2 PCI-E 3.0 x16 slots
5	I/O Ports	Single-Port FDR 56Gb/s InfiniBand Adapter and 3M InfiniBand cable 2x Gigabit Ethernet Port Dedicated Port for IPMI/management 1x VGA & at least 2x USB 3.0 ports
6	Power Supply	Redundant Power Supplies Titanium Level (96%)
7	Warranty	3 years on-site comprehensive warranty

GPU Nodes: Quantity 1No

1	Processor	2 x Intel Skylake 6126 12C/24T 2.6G 19.25M 10.4GT UPI
2	Memory	4x 16GB DDR4 Reg. ECC 2666MHz; total 16 DIMM slots required
3	Internal Storage	2x 1TB SATA 7.2K RPM 2.5"
4	PCI Slot	4 PCI-E 3.0 x16 (FHFL) slots, 2 PCI-E 3.0 x16 (LP) slots
5	GPU	NVIDIA Quadro P5000 16GB
6	I/O Ports	Single-Port FDR 56Gb/s InfiniBand Adapter and 3M InfiniBand cable 2x Gigabit Ethernet Port Dedicated Port for IPMI/management 1x VGA & at least 2x USB 3.0 ports
7	Formfactor	1U
8	Power Supply	Redundant Power Supplies Titanium Level (96%)
9	Warranty	3 years on-site comprehensive warranty

Interconnect

1	Primary Interconnect InfiniBand Switch	12-Port FDR 56Gb/s InfiniBand Switch with 3 years warranty, Rack mount kit, Power supply
2	Secondary interconnect Gigabit Switch	24-Port Gigabit Ethernet Switch with required number of 2m CAT6 cable

The vendor should quote with upgradable option.

OTHER TERMS & CONDITIONS:

1	Operating System	Open Source Cent OS Linux
2	Eligibility Criteria	<ul style="list-style-type: none">• Bidder must quote for the entire solution; partial offers will not be accepted• The bidder should be an ISO certified company• The bidder must have office in Chennai and HPC Engineer details to be furnished• The Bidder must be at least submitting minimum 2 or 3 satisfactory Deployment reports from the reputed organization.
3	Other conditions	<ul style="list-style-type: none">• The server and all its components should be verified and recommended by the motherboard manufacturer by means of compatibility list.
4	Installation, Warranty and Training	<ul style="list-style-type: none">• The vendor shall install and configure all required hardware and open source software suites, including but not limited to racking and stacking, cluster networking, configuring, installation of open source compilers and applications, configuration of environment variables and license utility configuration.• The vendor to ensure that the hardware and software components are compatible with each other, and provide necessary cables/wires and any other accessories necessary for connecting the supplied components. Bidder must install the complete system interconnecting all the components above.
5	Compliance statement	<ul style="list-style-type: none">• Compliance statement needs to be provided by vendors clearly specifying COMPLY/NONCOMPLY with remarks of all of the points mentioned above.

2. SCHEDULE OF FEES - I

SPECIFICATION NO. OED / NTCPWC / HPC / 2018 / 01

Name of the Work:

“Procurement of HPC Cluster - 10 T flops & Graphics card for National Technology Centre for Ports, Waterways and Coasts (NTCPWC)”.

FEE SCHEDULE FOR PROCUREMENT:

Sl. No	Description	%
1	Payment against delivery	70 %
2	After successful installation	30 %

SIGNATURE :
NAME :
DESIGNATION :
DATE :
PLACE :
SEAL

3. ANNEXURE-I

(This should be given after issuing the work order – This is applicable for selected L1 bidder)

UNDERTAKING TOWARDS JURISDICTION FOR LEGAL PROCEEDINGS

(NON JUDICIAL STAMP PAPER VALUE RS.100/-)

This undertaking executed at.....on this (Date) (Month) Two thousand and by M/s Registered under Companies Act, 1956 having its registered office at hereinafter called the contractor (which expression shall where the context so admits mean and include its successors in office and in favour of Indian Institute of Technology Madras, Chennai- 600 036. herein after called the purchaser (which expression shall where the context so admits means and includes its successors if Office and assigns).

WHEREAS a contract for the supply ofhas been awarded in favour of the contractor under the Purchase order No.....dated.....

AND WHEREAS in accordance with the terms of the above Purchase order, the contractor has to furnish un undertaking to the effect that no suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in any matter in any respect under this contract shall be instituted in any court other than in the High court, Madras of District court at or Sub-court ator at the District Munsiff court at as the case may be.

IN CONSIDERATION of the Board having agreed to accept the undertaking the contractor hereby undertakes that no suit or any proceedings in regard to any matter arising in respect of this contract shall be instituted in any court, save in the High court, Madras or District court at.....or sub court at or at the District Munsiff court atas the case may be it is agreed that no other court shall have jurisdiction to entertain any suit or proceedings, even though , part of the cause of action might arise within their jurisdiction. In case any part of the cause of action might arise within the jurisdiction of any other Courts in Tamil Nadu and rest within the jurisdiction of Courts outside the State of Tamil Nadu , then it is agreed to between the parties that such suits on proceedings shall be instituted in a court within the State of Tamil Nadu and no other Court outside the State of Tamil Nadu shall have jurisdiction.

IN WITNESS WHEREOF Thiru..... of M/s hereby put his hand and seal for due observance of the undertaking in the presence of the following witnesses

COMPANY SEAL		SIGNATURE	:
DESIGNATION	:		
COMPANY	:		
DATE	:		

WITNESSES:

- 1)
- 2)