

INVITATION FOR TENDER FOR SUPPLY OF EQUIPMENT

Sealed tender offers are invited in two separate sealed covers (Technical and Commercial offers) from eligible manufacturers/suppliers or their direct Indian agents for the supply of the following equipment.

Rack Servers, GPU Servers, and Storage System for Digital Library

Please send offers, ALONG WITH DESCRIPTIVE CATALOGUE/BROCHURE. The validity of the bid should be at least four months (120 days) or more from the date of the opening of this tender. Please ensure that your quotation reaches not later than **20.04.2017 at 15:00 hrs** at the following address:

Dr. B. Sutradhar
Librarian, Central Library,
Indian Institute of Technology Kharagpur,
Pin-721 302, West Bengal, India

Earnest money of **Rs. 2,00,000/-** is to be deposited in the form of Account Payee Demand Draft in favour of IIT Kharagpur, payable at Kharagpur, India. Any bid which is not accompanied with an EMD shall be summarily rejected. Earnest money deposited will be forfeited if the bidder withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. No interest will be paid on the earnest money of the unsuccessful bidders.

Tender Reference	IIT/LIB/EQ/BNA/2016-2017/6, Dated: 20.03.2017
Price of Tender Document	NIL
Last Date and Time for submitting the tender document	20th April 2017, 15:00 Hrs (Indian time)
Time and Date of Opening of Bids	20th April 2017, 16:00 Hrs (Indian time)
Place of Opening tender offers	Meeting Room, National Digital Library Project, Central Library Annex Building, IIT Kharagpur – 721 302, West Bengal, India
Address of Communication	As stated above
Contact Telephone Numbers	+91- 3222 - 282432
E-mail:	bsutra@library.iitkgp.ernet.in

Rack Servers, GPU Servers, and Storage System for Digital Library

The National Digital Library's Content Storage and Dissemination System is being designed as part of a national initiative to aggregate and provide easy access to educational content from various sources. This tender is to procure hardware infrastructure necessary for supporting the developmental and research activities of the project. There are two parts of the systems to be procured, identified as **System-1** and **System-2** in the rest of this tender.

1. **System-1**: 1 no. 42u rack with
 - a. 3 no. rack servers with CPU and GPU
 - b. 1 no. 40 TB (usable) NAS.
 - c. Switches to interconnect the storage and servers
 - d. Other accessories like monitor, keyboard etc.
2. **System-2**:
 - a. 5 no. rack servers

System-1 will have to be installed & connected to the institute network. System-2 will have to be installed in an existing rack and connected to an existing Gigabit Ethernet switch (Dell make) in the rack. The detailed technical specification of System-1 is given in ANNEXURE-1. The specification for System-2 is given in ANNEXURE-2.

1. Scope of Work

1. The bidder must install the System-1 consisting of rack servers with Nvidia GPU card & NAS such that all servers can access the NAS and all servers can communicate with each other and institute network as well. The bidder has to install System-2 consisting of 5 rack servers within an existing rack and ensure network connectivity through an already existing 1G Ethernet switch.
2. The bidder must install the necessary drivers required for Nvidia GPU cards in the servers specified in System-1 and ensure the access of CUDA cores by running test programs supplied by IIT Kharagpur.
3. All necessary cables, sliding rails and any other accessories needed for installation must be supplied by the bidder.
4. Servers, storage, and switches must be from the same OEM, except GPU cards which are from Nvidia
5. Delivery of the system will have to be made in IIT Kharagpur.
6. All software licenses must be perpetual in nature. All necessary software & firmware upgrades must be provided free of cost during entire the warranty period.

2. OEM Prequalification

1. OEM must have sales and support office in India
2. OEM must be in operation in the Indian market for at least 10 years for servers and storage
3. OEM must have spare depot in India for the items mentioned in this tender (details of

- spare locations to be provided)
4. OEM must have at least 10 installations in Eastern India with 10 or more servers (List of installations with no. of servers and contact information of the customer to be provided)

3. Bidder Pre-qualification

1. The bidder must be ISO certified.
2. The bidder must be Original Equipment Manufacturer (OEM) or authorized distributor of the systems (Attach documentary proof). The authorization letter issued by the OEM (specifically against this tender) should be enclosed.
3. Bidder must be a profit-making entity for the last 3 years, with an annual turnover of at least Rs. 25 Crores in each of the last 3 years (audited statements to be provided)
4. Bidder must have sales and support service centers in India (Details to be provided).
5. Bidder must have at least 3 installations of servers/storage of value at least 50 Lakhs each in Eastern India in the past 3 years (copy of PO/successful installation certificate to be enclosed)
6. The bidder should have at least two technical staff capable of attending any service complaints and coordinate with OEM for rectification of the same.

4. Warranty and Support

1. All systems must have 5 years comprehensive onsite OEM warranty.
2. Both the bidder and the OEM will be responsible for providing support to the system during the warranty period. IIT Kharagpur must be able to contact both the bidder and the OEM for service during the entire warranty period. However, it should be clearly stated who will provide first level support. If the OEM will provide first level support for some equipment, certification to this effect from the OEM must be provided for each of the equipment (Servers, NAS, network switch).
3. The bidder must provide a write up on its service and maintenance capability, and the escalation support matrix suggested for the Institute.
4. The OEM must provide details of support structure and escalation matrix.

5. Other Terms and Conditions

1. Technical bid should contain all relevant technical details; printed technical brochure of models quoted and other details, which may be necessary to ensure that the offer is complete in all respect e.g. technical specifications, etc.
2. Technical bid must also contain
 - a. Compliance Certificate against each item in the detailed technical specification duly signed by the bidder.
 - b. Unpriced Bill of Materials
 - c. Compliance to General Terms and Conditions
3. All prices must be quoted in Indian Rupees only
4. L1 bidder will be decided based on the grand total of prices of all items mentioned in the tender.

ANNEXURE-1
Detailed Technical Specifications of System-1

1. Specification for Rack Servers with GPU card

No. of rack servers to be supplied: 3

Components	Minimum Specification
Processor	Intel Xeon E5-2600v4 series, 2.2 GHz (Base Frequency) or higher
Front Side Bus	Intel QPI – 9 GT/s or higher
No. of Processors	1
Number of Cores	22
L3 Cache	2.5 MB per core or higher
DIMM slots	16 or higher
Memory	256 GB DDR4 ECC 2400 MHz or higher
Hard Disk	4 TB usable (uncompressed) space with RAID 5 using 10K rpm or higher hot swap SFF SAS drives. Bidder must specify the exact number and size of disks to be provided in BOQ.
Raid Controller	Integrated PCI 3.0 RAID Controller supporting RAID 5 and 6
Network Interface	4x1 Gbps + 2x10Gbps SFP+ ports. 10 Gbps ports must be populated with MMF modules from day 1.
USB Ports	4 or higher, of which at least 2 must be USB 3.0
GPU Cards	2 nos. NVIDIA Quadro P5000
GPU Memory	16 GB per GPU Card
GPU Interface	Dedicated 16xPCI Express bus (Gen 3.0)
Bus Slots	At least two (x16) PCI-Express slots
Power Supply	Dual redundant (1+1) hot-plug power supplies, 1100W or higher
Fans	Redundant hot-swap fans
OS	Must support latest versions of Redhat Enterprise Linux, CentOS and Windows 2012 server. Must be installed with latest version of CentOS along with drivers for NVidia GPU card
Form Factor	2U or lower
Warranty	5 years comprehensive onsite OEM warranty

2. Specification for Network Attached Storage (NAS) Solution

No. of NAS Solution to be supplied: 1

Component	Minimum Required Specifications
Storage Capacity	40 TB usable (uncompressed) storage space with RAID 5 and 6 with at least 4 disk groups
R/W Speed	Must support a sustained read speed of at least 10 Gbps and write speed of at least 1 Gbps.
Disk Type	10K rpm or higher hot swap SFF SAS drives (900GB or lower)
NAS controller	Dual redundant NAS controller to be clustered in active-standby with automatic failover (bidder must establish the clustering and any necessary hardware and software, including any additional machines and OS, for this must be supplied by bidder. Any additional machines supplied should also be fault tolerant, so that failure of one machine cannot break the clustering)
Network Interface	Dual 10Gbps Ethernet SFP+ ports per controller (for a total of 4 no. 10G ports) + dual 1Gbps port per controller (for a total of 4 no. 1Gbps ports) or higher. The SFP+ ports must be populated with MMF modules from day 1.
File System Support	NFS, CIFS, should be possible to create separate partitions for file systems
Client OS Support	Must be supported from both Linux, Windows and VMWare
Power Supply	Dual redundant hot-swap power supply
Cooling Units	Redundant hot swap cooling
Manageability	Must be possible to manage remotely over network (any remote management software to be included)
OS and Management	Must come with NAS optimized operating system and storage management software with unlimited use access and perpetual license.
Warranty	5 years comprehensive onsite OEM warranty

3. Specification for 32-port Ethernet Switch

No. of switch to be supplied: 2

Components	Minimum Required Specs.
Port Configuration	Layer 2 switch with static routing. At least 16 no. SR SFP+ 10Gbps Ethernet ports fully populated with MMF modules from day 1, and at least 16 no. Gigabit Ethernet ports with additional two dedicated stacking ports. All ports must be ready to use from day 1.
Management	Web-based management interface; BootP/DHCP IP address management or Static IP address assignment.
Security	Switch access password protection (read-only and read-write access).
Power and Cooling	The switch must have redundant power supply and fan modules
Warranty	5 years comprehensive onsite OEM warranty

The 10G ports of the NAS controllers are to be connected to the 10G ports of the switches in a redundant fashion (both controllers connected to both switches). The servers are to be connected to the switches using 1G ports of the switch in a redundant fashion (each server connected to both switches). The external internet connectivity is through 1G ports. All necessary cables and other

accessories needed for connecting these are to be provided by the bidder.

4. Specification for Rack, Monitor, Keyboard, Mouse and KVM switch

No. of rack to be supplied: 1

No. of monitor, keyboard, mouse to be supplied: 1

No. of KVM switches to be supplied: 1

42U, 4 post, 19" width. Rack should have keyboard and mouse tray, sufficient cooling fans and IEC power distribution unit with front and rear doors with lock. The dimensions of the rack must be compatible with all the equipment supplied here and the bidder should be able to install all the equipment supplied within a single rack. Bidder must provide all necessary cables (network and power) and other accessories for installing and connecting the equipment supplied.

21 inch or higher LED monitor, USB keyboard, USB mouse

16 port KVM switch with support for USB keyboard and mouse along with necessary cables.

5 years comprehensive onsite warranty should be provided for all.

ANNEXURE-2
Detailed Technical Specifications of System-2

1. Specification for Rack Servers

No. of rack servers to be supplied: 5

Components	Minimum Specification
Processor	Intel Xeon E5-2600v4 series, 2.2 GHz (base frequency) or higher
Front Side Bus	Intel QPI – 9 GT/s or higher
No. of Processors	2
Number of Cores	18 or higher
L3 Cache	2.5 MB per core or higher
DIMM slots	16 or higher
Memory	256 GB DDR4 ECC 2400 MHz or higher
Hard Disk	4 TB usable (uncompressed) space with RAID 5 using 10K rpm or higher hot swap SFF SAS drives. Bidder must specify the exact number and size of disks to be provided in BOQ.
Raid Controller	Integrated PCI 3.0 RAID Controller
Network Interface	2x1 Gbps ports + 2x10Gbps SFP+ ports. 10 Gbps ports must be populated with MMF modules from day 1
USB Ports	4 or higher, of which at least 2 must be USB 3.0
Bus Slots	At least one PCI-Express slots
Power Supply	Dual redundant (1+1) hot-plug power supplies, 750W or higher
Fans	Redundant hot-swap fans
OS	Must support latest versions of Redhat Enterprise Linux, CentOS and Windows 2012. Should be installed with latest version of CentOS.
Form Factor	1U only
Warranty	5 years comprehensive onsite OEM warranty

GENERAL TERMS & CONDITIONS

PLEASE SPECIFICALLY INDICATE THE FOLLOWING POINTS IN YOUR QUOTATIONS AND COMPLY THE TERMS AS MENTIONED HERE UNDER: -

1. TENDERS ARE INVITED COMPLYING THE REQUIREMENT FOR TENDER AS DETAILED IN THE TENDER SPECIFICATION TO BE SUBMITTED IN THE COMPANY'S / FIRM'S LETTERHEAD NEATLY PRINTED / TYPED DULY SIGNED BY AUTHORIZED PERSON WITH THE SEAL OF THE BIDDERS. ALL ENVELOPS CONTAINING THE TENDER SHOULD BE PROPERLY SEALED. SEPARATE ENVELOPS SHOULD BE USED FOR TECHNICAL AND PRICE BID AND INDICATION TO THEIR EFFECT MAY PLEASE BE SUPERSCRIBED ON THE ENVELOP.
2. TECHNICAL CATALOGUE/LEAFLET SHOULD BE ENCLOSED WITHOUT FAIL. PROVIDE COMPLIANCE STATEMENT WITH RESPECT TO THE TECHNICAL SPECIFICATIONS MENTIONED ABOVE.
3. PLEASE CONFIRM WHETHER YOU ARE AUTHORISED TO QUOTE ON BEHALF OF YOUR PRINCIPALS AND IF SO, PLEASE ENCLOSE A COPY OF SUCH AUTHORISATION WITH YOUR QUOTATION.
4. **PRICE BIDS:** PRICES ARE TO BE QUOTED ON F.O.R., IIT KHARAGPUR, ON DOOR DELIVERY BASIS CLEARLY SHOWING THE BREAK UP. PRICES SHOULD BE INCLUSIVE OF INSTALLATION, COMMISSIONING AND WARANTEE/GUARANTY SUPPORT.

ALL PRICES MUST BE QUOTED IN INDIAN RUPEES ONLY.

5. **PERIOD OF VALIDITY:** BIDS SHALL REMAIN VALID FOR ACCEPTANCE FOR A PERIOD OF 120 DAYS FROM THE DATE OF OPENING.
6. INDIAN AGENTS ADDRESS AND PERCENTAGE OF AGENCY COMMISSION INCLUDED IN ABOVE F.O.B./EX-WORKS PRICE. (THIS WILL BE PAID TO THE INDIAN AGENTS IN INDIAN RUPEES ONLY AND NOT IN **FE**). PLEASE ENCLOSE COPY OF AGENCY AGREEMENT ENTERED INTO WITH YOUR PRINCIPALS INDICATING THE NATURE OF AFTER SALES SERVICES OF INDIAN AGENTS, PRECISE RELATIONSHIP & MUTUAL INTEREST IN THE BUSINESS.
7. **MEASUREMENTS/WEIGHT:** NETT/GROSS OF THE CONSIGNMENT. IN CASE OF AN ORDER, YOU SHALL USE AIR WORTHY PACKAGE (AS APPLICABLE) DULY CERTIFIED WITH DOCUMENTS – PLYTO – SANITARY CERTIFICATE (AS PER QUARANTINE ORDER 2003).
8. **SCOPE OF SUPPLY:** SHOULD INCLUDE FREE INSTALLATION AND COMMISSIONING.
9. **PAYMENT TERMS:**
 - A) 90% PAYMENT THROUGH CROSSED ACCOUNT PAYEE CHEQUE / ELECTRONIC TRANSFER AFTER RECEIPT OF STORE IN GOOD ORDER AND CONDITION AND CONDITION AND SUCCESSFUL INSTALLATION AND COMMISSIONING. THE REMAINING 10% PAYMENT WILL BE RELEASED ON SUBMISSION OF PERFORMANCE BANK GUARANTEE OF EQUAL AMOUNT VALID FOR END OF WARRANTY PERIOD PLUS THREE MONTHS.

B) ENSURE MENTIONING

- BANK DETAILS OF THE BENEFICIARY AND PAN NUMBER

- FULL NAME AND ADDRESS OF THE BENEFICIARY ON WHOM ORDER HAS TO BE PLACED
10. WHETHER ANY EXPORT LICENCE IS REQUIRED FROM YOUR GOVERNMENT, IF SO, PLEASE CONFIRM WITH DETAILS.
 11. COUNTRY OF ORIGIN OF THE GOODS IS TO BE MENTIONED.
 12. THE INSTITUTE SHALL PROVIDE THE CONCESSIONAL CUSTOMS DUTY AND EXCISE DUTY EXEMPTION CERTIFICATE AS PER GOVT. NOTIFICATION NO. 51/96 CUSTOMS DATED: 23.07.1996 AND CENTRAL EXCISE DUTY EXCEMPTION IN TERMS OF GOVT. NOTOFICATION NO. 10/97 – CENTRAL EXCISE DATED: 01.03.1997 AS AMENDED FROM TIME TO TIME.
 13. **DELIVERY PERIOD:** WITHIN 10 WEEKS OF RECEIVING CONFIRMED PO.
 14. **LIQUIDATED DAMAGES:**
 - A) THE STORES SHOULD BE DELIVERED / DISPATCHED TO DESTINATION AND READY FOR OPERATION NOT LATER THAN THE DELIVERY DATE SPECIFIED. IF THE SUPPLIER FAILS TO DELIVER ANY OR ALL THE STORES OR PERFORM THE SERVICE BY THE SPECIFIED DATE, LIQUIDATED DAMAGES AT 1% PER MONTH OR PART THEREOF IN RESPECT OF THE VALUE OF STORES WILL BE DEDUCTED FROM THE CONTRACT PRICE SUBJECT TO A MAXIMUM OF 5%. ALTERNATIVELY, THE ORDER WILL BE CANCELLED AND THE UNDELIVERED STORES PURCHASED FROM ELSEWHERE AT THE RISK AND EXPENSE OF SUPPLIER.
 - B) SUCCESSFUL INSTALLATION AND COMMISIONING MUST BE COMPLETED WITHIN FOUR WEEKS OF DELIVERY OF STORES OR HANDOVER OF SITE, WHICHEVER IS LATER, FAILING WHICH LIQUIDATED DAMAGES WILL BE CHARGED AT THE SAME RATE AS MENTIONED ABOVE. THIS LIQUIDATED DAMAGE WILL BE IN ADDITION TO ANY LIQUIDATED DAMAGE CHARGED FOR LATE DELIVERY AS MENTIONED ABOVE.
 15. **PATENT RIGHTS:** THE SUPPLIER SHALL INDEMNIFY THE PURCHASE AGAINST ALL THIRD PARTY CLAIMS OF INFRINGEMENT OF PATENT, TRADEMARK OR INDUSTRIAL DESIGN RIGHTS ARISING FROM USE OF THE GOODS OR ANY PART THEREOF IN INDIA.
 16. ONLY THOSE BIDDERS WHOSE BIDS HAVE BEEN TECHNICALLY FOUND ACCEPTABLE WILL BE INVITED FOR PARTICIPATION IN THE PRICE BID.
 17. THOSE BIDDERS WHO DO NOT RECEIVE ANY COMMUNICATION FOR PARTICIPATION IN PRICE BID OPENING MEETING MAY PRESUME THAT THEIR BID HAS NOT BEEN ACCEPTED BY THE INSTITUTE.
 18. CONDITIONAL OFFER WILL NOT BE ACCEPTED.
 19. LATE TENDERS I.E. TENDER RECEIVED AFTER THE DUE DATE AND TIME OF SUBMISSION AS MENTIONED ABOVE SHALL NOT BE ACCEPTED.
 20. BIDDERS TO ENCLOSE THE FOLLOWING DOCUMENTS:-
 - A) CURRENT INCOME TAX AND SALES TAX CLEARANCE CERTIFICATES AND PAN NO.
 - B) BANKER’S SOLVENCY CERTIFICATE
 - C) SUMMARY OF AUDITED STATEMENT OF ACCOUNTS FOR THE LAST THREE YEARS TO BE ENCLOSED AND FINANCIAL HIGHLIGHTS AND THE KEY PERFORMANCE DURING THE

LAST THREE QUARTERS TO BE ENCLOSED AS PER FORMAT:-

COMPANY'S KEY PERFORMANCE

DESCRIPTION	JAN. TO MARCH	APRIL TO JUNE	JULY TO SEPT.
GROSS REVENUE			
PROFIT BEFORE TAX			
PROFIT AFTER TAX			
RETURN ON INVESTED			
CAPITAL (ROIC)			

D) CUSTOMER SATISFACTION CERTIFICATE FROM ONE SUCH ORGANIZATION IS TO BE ATTACHED WITH THE TECHNICAL BID AND PRICE BID.

E) NAME AND ADDRESS OF MINIMUM THREE CLIENTS TO WHOM SUCH EQUIPMENT HAVE BEEN SUPPLIED SHOULD BE MENTIONED.

21. **WARRANTY / GUARANTEE:** THIS COMPREHENSIVE WARRANTY / GUARANTEE SHALL REMAIN VALID FOR **60 MONTHS** AFTER THE GOODS (OR ANY PORTION THEREOF AS THE CASE MAY BE) HAVE BEEN DELIVERED AND COMMISSIONED TO THE FINAL DESTINATION.

22. THE INSTITUTE DOES NOT BIND ITSELF TO OFFER ANY EXPLANATION TO THOSE BIDDERS WHO'S TECHNICAL BID HAS NOT BEEN FOUND ACCEPTABLE BY THE EVALUATION COMMITTEE OF THE INSTITUTE.

23. ALL TENDERS (UNLESS OTHERWISE SPECIFIED) ARE TO BE SUBMITTED / HANDED OVER TO **DR. B. SUTRADHAR, LIBRARIAN, CENTRAL LIBRARY, INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR - 721 302** AND ACKNOWLEDGEMENT TO BE OBTAINED.

IMPORTANT

1. IIT Kharagpur authority may accept or reject any or all the bids in part or in full without assigning any reason and does not bind itself to accept the lowest bid. The Institute at its discretion may change the quantity / upgrade the criteria / drop any item or part thereof at any time before placing the Purchase Order.
2. Promptly make arrangements for repair and / or replacement of any damaged item (s) irrespective of settlement of claim.
3. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
4. For any query pertaining to this bid document correspondence may be addressed to **Dr. B. Sutradhar**, at the address mentioned above.

LAST DATE FOR SUBMISSION OF SEALED BIDS: 20.04.2017

- 1) Please Note that the Institute remains closed during Saturdays & Sundays and all specified government holidays.
- 2) Fax, e-mail Tender will not be accepted.
- 3) The General Terms and Conditions as stated above relate to supply of stores / equipment /assets etc. and for specific service other terms and conditions of the Institute will apply.