

Notice Inviting Quotation (E-Procurement mode)

कोटेशन को आमंत्रित करने की सूचना(ई-प्रोक्योरमेंट मोड)

INDIAN INSTITUTE OF TECHNOLOGY DELHI

भारतीय प्रौद्योगिकी संस्थान दिल्ली

HAUZ KHAS, NEW DELHI-110016

हौज खास, नई दिल्ली -110016

Dated/ दिनांक: 13/12/2017

Open Tender Notice No./खुला प्रस्तावनिविदा सूचना नंबर:IITD/BCHM(SP-1426)/2017

Indian Institute of Technology Delhi is in the process of purchasing following item(s) as per details as given as under.

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी दिल्ली निम्नलिखित मदों की खरीद की प्रक्रिया में है।

Details of the item आइटम का विवरण	Supply & Installation of High Performance Computing Systems along with Cooling solution at SCFBio, IIT Delhi
Earnest Money Deposit to be submitted बयाना जमा करने के लिए जमा राशि	Rs./ रुपये Rs. 4,00,000 (Four Lakhs Only)
Warranty वारंटी अवधि	3 Years/3 साल
Performance security निष्पादन सुरक्षा	10% of FOB value एफओबी मूल्य का 10%

Tender Documents may be downloaded from Central Public Procurement Portal <http://eprocure.gov.in/eprocure/app>. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website <http://eprocure.gov.in/eprocure/app>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.

निविदा दस्तावेज केन्द्रीय सार्वजनिक खरीद पोर्टल <http://eprocure.gov.in/eprocure/app> से डाउनलोड हो सकते हैं ई-प्रोक्योरमेंट में पंजीकृत नहीं होने वाले इच्छुक बोलीदाताओं को वेबसाइट <http://eprocure.gov.in/eprocure/app> के माध्यम से भाग लेने से पहले पंजीकरण करना चाहिए। पोर्टल नामांकन मुफ्त है बोलीदाताओं को सलाह दी जाती है कि 'ऑनलाइन बोली के लिए निर्देश' पर दिए गए निर्देशों के माध्यम से जाने की सलाह दी जाए।

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <http://eprocure.gov.in/eprocure/app> as per the schedule given in the next page.

निविदाकर्ता वेबसाइट पर निविदा दस्तावेज का उपयोग कर सकते हैं (एनआईसी साइट में खोज के लिए, कृपया निविदा खोज विकल्प और 'आईआईटी' टाइप करें। उसके बाद, सभी आईआईटी दिल्ली निविदाओं को देखने के लिए "गो" बटन पर क्लिक करें) उपयुक्त निविदा का चयन करें और उन्हें सभी प्रासंगिक सूचनाओं से भरें और वेबसाइट पर <http://eprocure.gov.in/eprocure/app> पर पूरा निविदा दस्तावेज ऑनलाइन जमा करें। अगले पृष्ठ में दिए गए कार्यक्रम के अनुसार

No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the E-procurement portal).

कोई मैनुअल बोली स्वीकार नहीं की जाएगी। सभी कोटेशन (तकनीकी और वित्तीय दोनों को ई-प्रोक्योरमेंट पोर्टल में जमा करना चाहिए)

SCHEDULE

Name of Organization	Indian Institute of Technology Delhi
Tender Type (Open/Limited/EOI/Auction/Single)	Open
Tender Category (Services/Goods/works)	Goods
Type/Form of Contract (Work/Supply/Auction/Service/Buy/Empanelment/ Sell)	Buy
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	Computer Systems
Source of Fund (Institute/Project)	Budget Code: <u>Equipment</u> / Project Code: <u>RP02813</u>
Is Multi Currency Allowed	YES (INR)/(USD)
Date of Issue/Publishing	13/12/2017 (16:00 Hrs)
Document Download/Sale Start Date	13/12/2017 (16:00 Hrs)
Document Download/Sale End Date	08/01/2018 (15:00 Hrs)
Date for Pre-Bid Conference	-----
Venue of Pre-Bid Conference	-----
Last Date and Time for Uploading of Bids	08/01/2018 (15:00 Hrs)
Date and Time of Opening of Technical Bids	09/01/2018 (15:00 Hrs)
Tender Fee	Rs. <u>NIL/-</u> (For Tender Fee)
EMD	Rs. <u>4,00,000/-</u> (INR Four Lakhs Only) (For EMD) (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, New Delhi-110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the on-line quotation/bid. (Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II)
No. of Covers (1/2/3/4)	02
Bid Validity days (180/120/90/60/30)	180 days (From last date of opening of tender)
Address for Communication	Coordinator, Supercomputing Facility for Bioinformatics and Computational Biology (SCFBio), 3 rd Floor, Synergy Building, IIT Delhi.
Contact No.	011-26596786, 011-26596722
Email Address	bjayaram@chemistry.iitd.ac.in , bjayaram@scfbio-iitd.res.in

**Chairman Purchase Committee
(Buyer Member)**

Instructions for Online Bid Submission/ऑनलाइन बोली (बिड) के लिए निर्देश:

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

व्यय विभाग के निर्देशों के अनुसार, यह निविदा दस्तावेज केंद्रीय सार्वजनिक प्रापण पोर्टल (यूआरएल: <http://eprocure.gov.in/eprocure/app>) पर प्रकाशित किया गया है। बोलीदाताओं को मान्य डिजिटल हस्ताक्षर प्रमाण पत्र का उपयोग करते हुए सीपीपी पोर्टल पर इलेक्ट्रॉनिक रूप से अपनी बोलियों की सॉफ्ट प्रतियां जमा करना आवश्यक है। सीपीपी पोर्टल पर पंजीकरण करने के लिए निविदाकर्ताओं की सहायता करने के लिए नीचे दिए गए निर्देशों का मतलब है, सीपीपी पोर्टल पर आवश्यकताओं के अनुसार अपनी बोलियां तैयार करें और अपनी बोलियां ऑनलाइन जमा करें।

More information useful for submitting online bids on the CPP Portal may be obtained at:

अधिक जानकारी सीपीपी पोर्टल पर ऑनलाइन बोलियां जमा करने के लिए उपयोगी हो सकती है:

<http://eprocure.gov.in/eprocure/app>

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link “Click here to Enroll”. Enrolment on the CPP Portal is free of charge.

बोलीदाताओं को "नामांकन के लिए यहां क्लिक करें" लिंक पर क्लिक करके सेंट्रल पब्लिक प्रोक्योरमेंट पोर्टल (यूआरएल: <http://eprocure.gov.in/eprocure/app>) के ई-प्रोक्योरमेंट मॉड्यूल पर भर्ती करना आवश्यक है। सीपीपी पोर्टल पर नामांकन नि: शुल्क है

- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

नामांकन प्रक्रिया के भाग के रूप में, बोलीदाताओं को अपने खाते के लिए एक अद्वितीय उपयोगकर्ता नाम चुनना होगा और एक पासवर्ड प्रदान करना होगा।

- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

बोलीदाताओं को सलाह दी जाती है कि पंजीकरण प्रक्रिया के भाग के रूप में अपना वैध ईमेल पता और मोबाइल नंबर पंजीकृत करें। इन का उपयोग सीपीपी पोर्टल से किसी भी संचार के लिए किया जाएगा।

- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.

नामांकन पर, बोलीदाताओं को सीसीए इंडिया द्वारा मान्यता प्राप्त किसी प्रमाणन प्राधिकरण द्वारा जारी किए गए अपने मान्य डिजिटल हस्ताक्षर प्रमाण पत्र (कक्षा द्वितीय या कक्षा III प्रमाण पत्र के साथ महत्वपूर्ण उपयोग पर हस्ताक्षर करने) की आवश्यकता होगी (जैसे सिफ़ी / टीसीएस / एनकोड / ई-मुद्राआदि) , उनके प्रोफाइल के साथ

- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.

केवल एक मान्य डीएससी एक बोलीदाता द्वारा पंजीकृत होना चाहिए। कृपया ध्यान दें कि निविदाकर्ता यह सुनिश्चित करने के लिए जिम्मेदार हैं कि वे अपने डीएससी को दूसरों को उधार नहीं देते हैं जिससे दुरुपयोग हो सकता है।

- 6) Bidder then logs in to the site through the secured log-in by entering their userID / password and the password of the DSC / eToken.

बोलीदाता फिर अपने यूजर आईडी / पासवर्ड और डीएससी / ईटीकेन के पासवर्ड को दर्ज करके सुरक्षित लॉग-इन के माध्यम से साइट पर लॉग ऑन करता है।

SEARCHING FOR TENDER DOCUMENTS/निविदा दस्तावेजों के लिए खोजना

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.

सीपीपी पोर्टल में निर्मित विभिन्न खोज विकल्प हैं, ताकि बोलीदाताओं को कई मापदंडों से सक्रिय निविदाएं खोज सकें। इन मापदंडों में निविदा आईडी, संगठन का नाम, स्थान, तिथि, मूल्य आदि शामिल हो सकते हैं। निविदाओं के लिए उन्नत खोज का एक विकल्प भी है, जिसमें बोलीदाता कई नामों को जोड़ सकते हैं जैसे संगठन का नाम, अनुबंध का स्थान, स्थान, सीपीपी पोर्टल पर प्रकाशित निविदा की खोज के लिए तारीख, अन्य कीवर्ड आदि।

- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

बोलीदाताओं ने एक बार निविदाएं चुनी हैं जिसमें वे रुचि रखते हैं, उसका वे आवश्यक दस्तावेज / निविदा कार्यक्रम डाउनलोड कर सकते हैं। ये निविदाएं 'मेरी निविदाओं' फ़ोल्डर में ले जाई जा सकती हैं। इससे सीपीपी पोर्टल को बोलीदाताओं को एसएमएस / ई-मेल के माध्यम से सूचित किया जा सकता है, यदि निविदा दस्तावेज में कोई शुद्धि जारी कि गई है।

- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

बोलीदाता को प्रत्येक निविदा को निर्दिष्ट अद्वितीय निविदा आईडी का नोट बनाना चाहिए, अगर वे हेल्पडेस्क से कोई स्पष्टीकरण / सहायता प्राप्त करना चाहते हैं।

PREPARATION OF BIDS / बोली (बिड) की तैयारी

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

बोलीदाता को अपनी बोलियां जमा करने से पहले निविदा दस्तावेज पर प्रकाशित किसी भी शुद्धि को ध्यान में रखना चाहिए।

- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

कृपया बोली के भाग के रूप में जमा किए जाने वाले दस्तावेजों को समझने के लिए निविदा विज्ञापन और निविदा दस्तावेज ध्यान से देखें। कृपया उन अंकों की संख्या पर ध्यान दें जिन में बोली दस्तावेज जमा करना है, दस्तावेजों की

संख्या - जिसमें प्रत्येक दस्तावेज के नाम और सामग्री शामिल हैं, जिन्हें प्रस्तुत करने की आवश्यकता है। इनमें से कोई भी विचलन बोली को अस्वीकार कर सकता है।

- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.

बोलीदाता, अग्रिम में, निविदा दस्तावेज / अनुसूची में बताए अनुसार प्रस्तुत करने के लिए बोली दस्तावेज तैयार करना चाहिए और आम तौर पर, वे पीडीएफ / एक्सएलएस / आरएआर / डीडब्ल्यूएफ स्वरूपों में हो सकते हैं। बोली दस्तावेजों को 100 डीपीआई के साथ काले और सफेद विकल्प स्कैन किया जा सकता है।

- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

मानक दस्तावेजों के एक ही सेट को अपलोड करने के लिए आवश्यक समय और प्रयास से बचने के लिए जो प्रत्येक बोली के भाग के रूप में जमा करने के लिए आवश्यक हैं, ऐसे मानक दस्तावेज अपलोड करने का प्रावधान (जैसे पैन कार्ड कॉपी, वार्षिक रिपोर्ट, लेखा परीक्षक प्रमाण पत्र आदि) बोलीदाताओं को प्रदान किया गया है। ऐसे दस्तावेजों को अपलोड करने के लिए बोलीकर्ता उनके लिए उपलब्ध "मेरा स्पेस" क्षेत्र का उपयोग कर सकते हैं। बोली जमा करते समय ये दस्तावेज सीधे "मेरा स्पेस" क्षेत्र से जमा किए जा सकते हैं, और उन्हें बार-बार अपलोड करने की ज़रूरत नहीं है इससे बोली जमा प्रक्रिया के लिए आवश्यक समय में कमी आएगी।

SUBMISSION OF BIDS/बोली (बिड) का जमा करना

- 1) Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

बोलीदाता को बोली प्रस्तुति के लिए अच्छी तरह से साइट पर लॉग इन करना चाहिए ताकि वह समय पर बोली अपलोड कर सके या फिर बोली प्रस्तुत करने के समय से पहले। अन्य मुद्दों के कारण किसी भी देरी के लिए बोलीदाता जिम्मेदार होगा।

- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

बोलीदाता को निविदा दस्तावेज में दर्शाए अनुसार एक-एक करके आवश्यक बोली दस्तावेजों को डिजिटल हस्ताक्षर और अपलोड करना होगा।

- 3) Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD / Tender fees is sought, bidders need to pay the tender fee and EMD separately on-line through RTGS (Refer to Schedule, Page No.2).

बोलीदाता को निविदा शुल्क / ईएमडी को भुगतान के लिए "ऑन लाइन" के रूप में भुगतान विकल्प चुनना होगा और उपकरण का विवरण दर्ज करना होगा। जब भी, ईएमडी / निविदा शुल्क की मांग की जाती है, बोलीदाताओं को टेंडर शुल्क और ईएमडी अलग-अलग आरटीजीएस के माध्यम से ऑन लाइन पर भुगतान करने की आवश्यकता होती है (अनुसूची, पेज नं .2 देखें)।

- 4) A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been

completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

एक मानक BoQ प्रारूप को सभी बोलीदाताओं द्वारा भरने के लिए निविदा दस्तावेज प्रदान किया गया है। बोलीदाताओं को इस बात का ध्यान रखना चाहिए कि उन्हें आवश्यक प्रारूप में अपनी वित्तीय बोली जमा करनी चाहिए और कोई अन्य प्रारूप स्वीकार्य नहीं है। बोलीकर्ताओं को BoQ फाइल को डाउनलोड करने, इसे खोलने और अपने संबंधित वित्तीय उद्धरण और अन्य विवरण (जैसे बोलीदाता का नाम) के साथ सफेद रंगीन (असुरक्षित) कोशिकाओं को पूरा करना आवश्यक है। कोई भी अन्य कक्ष नहीं बदला जाना चाहिए। एक बार विवरण पूरा हो जाने पर, बोलीदाता को इसे सहेजना होगा और इसे ऑनलाइन जमा करना होगा, बिना फाइल नाम बदलना। यदि BOQ फाइल को बोलीदाता द्वारा संशोधित किया गया है, तो बोली को खारिज कर दिया जाएगा।

OR/या

In some cases Financial Bids can be submitted in PDF format as well (in lieu of BOQ).

कुछ मामलों में वित्तीय बोलियां पीडीएफ प्रारूप में भी जमा की जा सकती हैं (BOQ के बदले)

- 5) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

सर्वर का समय (जो बोलीदाताओं के डैशबोर्ड पर प्रदर्शित होता है) बोलीदाताओं द्वारा बोलियों को खोलने के लिए समय सीमा को संदर्भित करने के लिए मानक समय के रूप में माना जाएगा। बोलीदाताओं को खोलना आदि। बोलीदाताओं को बोली प्रस्तुत करने के दौरान इस समय का पालन करना चाहिए।

- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.

बोलीदाताओं द्वारा प्रस्तुत सभी दस्तावेज पीकेआई एन्क्रिप्शन तकनीकों का उपयोग करके एन्क्रिप्ट किया जाएगा जिससे डेटा की गोपनीयता सुनिश्चित हो सके। दर्ज किए गए डेटा को अनधिकृत व्यक्तियों द्वारा बोली खोलने के समय तक नहीं देखा जा सकता है। बोलियों की गोपनीयता को सुरक्षित सॉकेट लेयर 128 बिट एन्क्रिप्शन तकनीक का उपयोग कर रखा जाता है। संवेदनशील क्षेत्रों का डेटा संग्रहण एन्क्रिप्शन किया जाता है।

- 7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

अपलोड किए गए निविदा दस्तावेज केवल अधिकृत बोलीदाता द्वारा निविदा खोलने के बाद ही पठनीय हो सकते हैं।

- 8) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

बोलियों के सफल और समय पर जमा होने पर, पोर्टल एक सफल बोली प्रस्तुत करने का संदेश देगा और एक बोली सारांश बोली संख्या के साथ प्रदर्शित किया जाएगा। और अन्य सभी प्रासंगिक विवरणों के साथ बोली प्रस्तुत करने की तारीख और समय।

- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

कृपया अनुपालन पत्रक की एक पीडीएफ फाइल में सभी प्रासंगिक दस्तावेजों के स्कैन किए गए पीडीएफ को जोड़ दें।

ASSISTANCE TO BIDDERS /बोलीदाताओं को सहायता

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

निविदा दस्तावेज से संबंधित कोई भी प्रश्न और इसमें निहित नियमों और शर्तों को निविदा आमंत्रण प्राधिकरण को निविदा के लिए या निविदा में वर्णित प्रासंगिक संपर्क व्यक्ति से संबोधित किया जाना चाहिए।

- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

ऑनलाइन बोली प्रस्तुत करने या सामान्य में सीपीपी पोर्टल से संबंधित प्रश्नों की प्रक्रिया से संबंधित कोई भी प्रश्न 24x7 सीपीपी पोर्टल हेल्पडेस्क पर निर्देशित किया जा सकता है। हेल्पडेस्क के लिए संपर्क संख्या 1800 233 7315 है

General Instructions to the Bidders /बोलीदाताओं के लिए सामान्य निर्देश

- 1) The tenders will be received online through portal <http://eprocure.gov.in/eprocure/app> . In the Technical Bids, the bidders are required to upload all the documents in .pdf format.

निविदाएं पोर्टल <http://eprocure.gov.in/eprocure/app> के माध्यम से ऑनलाइन प्राप्त होंगी तकनीकी बोलियों में, बोलीदाताओं को सभी दस्तावेजों को पीडीएफ प्रारूप में अपलोड करना होगा।

- 2) Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link "Information about DSC".

कंपनी के नाम में स्मार्ट कार्ड / ई-टोकन के रूप में मान्य क्लास II / III डिजिटल हस्ताक्षर प्रमाण पत्र (डीएससी) के पंजीकरण के लिए एक शर्त है और <https://eprocure.gov.in/eprocure/> के माध्यम से बोली प्रस्तुत करने की गतिविधियों में भाग ले सकते हैं। डिजिटल हस्ताक्षर प्रमाण पत्र अधिकृत प्रमाणित एजेंसियों से प्राप्त की जा सकती है, जिनमें से जानकारी "डीएससी के बारे में सूचना" लिंक के तहत वेब साइट <https://eprocure.gov.in/eprocure/app> पर उपलब्ध है।

- 3) Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>.

निविदाकर्ता को सलाह दी जाती है कि वे निविदाकार को निर्देश दिए गए हों ताकि ई-प्रोक्योरमेंट के लिए सेंट्रल पब्लिक प्रोक्योरमेंट पोर्टल के जरिए <https://eprocure.gov.in/eprocure/app> पर ऑनलाइन निविदाएं जमा कर सकें।

**Department of Chemistry
Indian Institute of Technology
HauzKhas, New Delhi-110 016**

NOTICE INVITING QUOTATIONS

Dated: 13/12/2017

Subject: Supply & Installation of High Performance Computing Systems along with cooling solution at SCFBio, IIT Delhi

Invitation for Tender Offers

Indian Institute of Technology Delhi invites online Bids (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for **supply, installation & integration of HPC Systems along with the related components and accessories** with (warranty period as stated at page #1 of this tender) on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document, which is available on CPP Portal <http://eprocure.gov.in/eprocure/app>

TECHNICAL SPECIFICATION:

1. Master Node – Qty 01

Sl. no	Item	Description of Requirement
1	Make/ Model Name	The system should be quoted with BOM and part codes. All the part codes should be from the same OEM
2	Form Factor	Rack mount Server 1U
3	Processor	2 x Intel Xeon Gold 6130 16C 2.10 GHz
5	Memory	96 (12 x 8 GB DIMM) GB Registered DDR4-2666 R ECC, in balanced configuration
6	Memory Features and scalability	Advanced ECC, SDDC (Chipkill™), Rank sparing, Memory Mirroring.
7	HDD	1 x SSD SATA 6G 150GB or higher internal, should be supplied with external JBOD having 4 x 8 TB or more, Helium filled 7.2 K RPM, SATA disks, 2 x I/O modules, JBOD should have 12 disk enclosure for redundancy, redundant power supply, 12 Gbps SAS connectivity to master node. JBOD should support scalability up to 48 x 3.5 " drives. JBOD, compute & Master node should be from same OEM.
8	RAID Controller	Raid support for - RAID Levels 0, 1, 10, 5, 50 for JBOD

9	Communication ports	The system should have at least 4 x 1 Gbit/s Ethernet ports , 1 x 100Gbps EDR/ Intel OPA
10	Noise level	max upto 55 db, ISO 7779
11	Expansion	4 PCIe 3.0 slots, at least 2 PCIe 3.0 x16 slots
12	Management	OEM Server Management Suite, Integrated remote management controller with dedicated 1GbE port, should support graphical console redirection and remote media redirection. Any licence for server management and KVM redirection should be included for warranty years.
13	OS	Cent OS/ RHEL
14	Power Supply	Redundant HotSwap power supply
15	Warranty	3 Years OEM comprehensive onsite warranty. The OEM should have Service setup in India.
16	Global compliance	CB, RoHS, WEEE, CE

2. Compute Node – Qty 23 (minimum) or even more depending on budget

One node in these 24 nodes should be supplied with at least 512 GB memory in total; Each and every DIMM slots should be populated. 2 x Intel Xeon Gold 6148 20C (rest all specifications would remain same as below)

Sl. no	Item	Description of Requirement
1	Make / Model Name	The system should be quoted with BOM and part codes. All the part codes should be from the same OEM
2	Form Factor	Rack mount chassis Maximum 2U; Maximum 4 servers in 2U.
3	Processor	2 x Intel Xeon Gold 6130 16C 2.10 GHz
5	Memory	96 GB (12 x 8 GB DIMM) Registered DDR4-2666 R ECC, in balanced configuration
6	Memory protection	Advanced ECC, SDDC
7	HDD	1 x SSD , 6 Gb/s, 256 GB or more
8	Communication ports	2 x 10/100/1000 Mbit/s Ethernet, 1 x EDR/ Intel OPA
9	Noise level	max upto 55 db, ISO 7779
10	Management	OEM Server Management Suite, Integrated remote management controller should support graphical console redirection and remote media redirection. Any license for server management and KVM redirection should be included for warranty period years.
11	Power Supply	Redundant Hot Swap power supply (N+1)
12	Warranty	3 Years OEM comprehensive onsite warranty. The OEM should have Service setup in India.

13	Global compliance	CB, RoHS, WEEE, CE
14	OS	CentOS

3. Fat Compute Node (High Memory) – Qty 01

Sl. no	Item	Description of Requirement
1	Make / Model Name	The system should be quoted with BOM and partcodes. All the part codes should be from the same OEM
2	Form Factor	Maximum 2U
3	Processor	2 x Intel Xeon Gold 6148
5	Memory	512 GB (All DIMM slots should be populated) Registered DDR4-2666 R ECC, in balanced configuration
6	Memory protection	Advanced ECC, SDDC
7	HDD	1 x SSD , 6 Gb/s, 256 GB or more
8	Communication ports	2 x 10/100/1000 Mbit/s Ethernet, 1 x EDR/OPA
9	Noise level	max upto 55 db, ISO 7779
10	Management	OEM Server Management Suite, Integrated remote management controller should support graphical console redirection and remote media redirection. Any license for server management and KVM redirection should be included for warranty period years.
11	Power Supply	Redundant HotSwap power supply (N+1)
12	Warranty	3 years OEM comprehensive onsite warranty. The OEM should have Service setup in India.
13	Global compliance	CB, RoHS, WEEE, CE
14	OS	CentOS

4. Storage I/O nodes - Qty 02

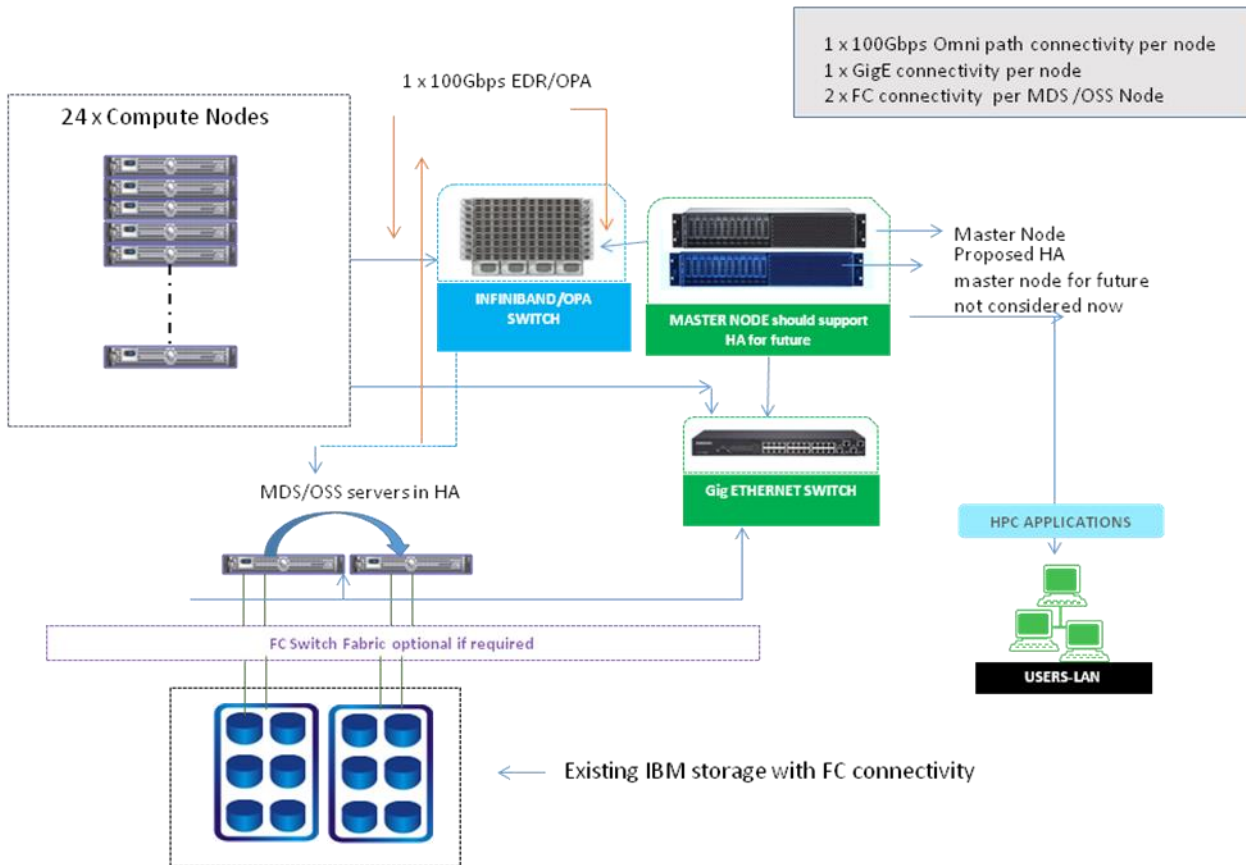
IIT Delhi SCFBio is having existing IBM 3524 Storage with 192 x 900 GB SAS 10 K disks, dual controllers with FC ports. Same is to be configured with new HPC setup (all supplied compute & Master nodes) with storage OEM supported Lustre. Bidder & OEM has to take responsibility for integration. IOR Benchmark to be submitted for performance after installation. Minimum **2 x I/O** nodes to be supplied with below mentioned minimum configuration. Lustre should be configured in such a way that it should give 1.5 GBps performance with IOR. Bidder has to configure Lustre and mount the file system on all compute nodes.

Sl. no	Item	Description of Requirement
1	Make / Model Name	The system should be quoted with BOM and part codes. All the part codes should be from the same OEM
2	Form Factor	Rack mount Server 1U
3	Processor	Intel Xeon Silver 4114 10C 2.20 GHz
4	No. of processors	2 Sockets populated
5	Chipset	Intel C610 chipset family
6	Memory	64 GB DDR4 Registered ECC
7	Memory Features and scalability	Advanced ECC, SDDC (Chipkill™), Rank sparing, Memory Mirroring support 24 DIMM slots
8	HDD	2 x HD SAS 12G 1.8TB 10K 512e HOT PL 2.5' EP support for 8 x 2.5" drives
9	RAID Controller	Raid support for - RAID Levels 0, 1, 10, 5, 50
10	HBA	4 x 8Gbps HBA with 5mts cables
11	ODD	DVD RW
12	Ethernet ports	The system should have atleast 4 x 1 Gbit/s ethernet ports
13	Expansion	4 PCIe 3.0 slots, at least 2 PCIe 3.0 x16 slots
14	Management	OEM Server Management Suite, Integrated remote management controller with dedicated 1GbE port, should support graphical console redirection and remote media redirection. Any licence for server management and KVM redirection should be included for 3 years.
15	OS	CentOS
16	Power Supply	Redundant Hot Swap power supply
17	Fans	Redundant Hot Swap Fans
18	Warranty	3 years OEM comprehensive onsite warranty. The OEM should have Service setup in India.
19	Global compliance	CB, RoHS, WEEE, CE
20	Noise level	max upto 55 db, ISO 7779

5. Connectivity

1	Interconnect / switch with 100 Gbps connection speed with at least 36 ports (Mellanox EDR/ Intel Omni Path) in 100% non blocking architecture, with required number of cables of appropriate length along with other accessories.	Qty 01
2	1 x GigE 48 ports network switch along with required numbers of CAT6 molded Cables of appropriate length to suite the solution	Qty 01

Connectivity Diagram for the Proposed Compute Solution (excluding Cooling Solution)



6. Power & Cooling.

Cooling solution with high "Energy efficiency", "sustainability"& with "Green IT" concept. The power consumption during running operations needs to be optimized.

1. Bidder has to provide Chiller water based cooling such that it can cater 35 KW IT load in a single rack.

2. Single Housing rack with attached cooling equipment for supplied IT equipment to be provided by bidder. One rack should take load of 35 KW or more. Cooling solution attached to single rack should be in redundancy.
3. All the systems asked above should be fit in single rack.
4. IIT Delhi CoE for Bioinformatics has space constraint, and hence we are looking for highly optimized solution in such a way that 35 KW load should be fit in single rack. Cooling solution to cater 35 KW in redundancy should be provided.
5. Water chilled based cooling should be designed in such a way , that it can be expanded in future to add another 20 KW IT load (could be in same or separate rack) without removing the existing supplied infrastructure.
6. All required PDU and power cables to be provided by the bidder.
7. The design of the cooling unit should be optimized for use in data centres. The integrated water heat exchanger should guarantee a cooling output of 35 KW.
8. The heat exchanger / cooling pumps should be mounted on the side of the Rack in redundancy.
9. The high-performance cooling solution should guarantee maximum cooling output (to cater 35 KW) even at high water inlet temperatures (upto 15 deg celsius).
10. In case of power outage such as chiller and air conditioner stops, in this situation ICT equipment must run under safe operating temperature for 15 minutes minimum without UPS and Generator or any power backup. Monitoring - Abnormal Temp, Abnormal Pressure, Leaking Coolant, Humidity. If somehow cooling system gets broken, the cooling system should report incident remotely.
11. Remote online monitoring of cooling system.
12. Humidity monitoring and control system to avoid dew drops.
13. System should be such that servers should be operating from humidity level 5~95 % RH.
14. Power strips in rack should be supplied in such a way to take care 35 KW load.
15. IIT Delhi will provide two power inlets 16 Amp/ 32 Amp 3 phase/ single phase Industrial sockets.
16. The proposed solution should be quoted with 3 Year OEM warranty and also 2 years AMC as optional support beyond the warranty Period.

7. OS – Scientific Linux (HPC version) latest stable version.

1. 64-bit Linux Operating System with SMP support and XPG 3, X-open compliant.
2. Standard utilities for system administration.
3. TCP/IP.
4. Journal File System.
5. Fortran77, Fortran90, Fortran95, C/C++ compilers
6. MPI-2 integrated with development environment.
7. OpenMP for Fortran90.
8. OpenMP for C/C++.
9. Optimized/parallelized mathematical libraries.
10. Development environment for MPI programming.
11. Operating system should be 64-bit LINUX with journaling file system and capable of supporting clustered shared file system. It should have enhancement for HPC applications with necessary certifications.
12. System accounting and auditing tools.
13. Volume manager with enhanced logical manager for high I/O performance monitoring

8. Scheduler - SLURM & TORQUE / equivalent with minimum basic configuration as below.

- Integrated workload management solution with web based job submission
- HA configuration to be done on 2 x Master nodes (if required).
- Portal should have Admin, User portal separately with features including basic accounting and reporting.
- Bidder should integrate user applications with batch submission script to facilitate seamless usage of the HPC system.
- At-least 10 concurrent users should be able to submit multiple jobs.
- Preemptive and backfill scheduling support

9. Cluster Manager software:

- a. GUI based cluster manager software
- b. GUI based management.
- c. Extensive cluster monitoring capability to drill down to a node-level.
- d. The management software should provide proactive notification.

Sl. no.	List of optional items
1.	AMC charges for 4 th and 5 th year to be mentioned for the quoted solution.

A complete set of tender documents* may be Download by prospective bidder free of cost from the website <http://eprocure.gov.in/eprocure/app>. Bidder has to make payment of requisite fees (i.e. Tender fees (if any) and EMD) online through RTGS/NEFT only.

Terms & Conditions Details

Sl.No.	Specification
1.	Due date: The tender has to be submitted on-line before the due date. The offers received after the due date and time will not be considered. No manual bids will be considered.
2.	Preparation of Bids: The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid in the given format i.e Financial Bids to be submitted in PDF format. The Technical bid and the financial bid should be submitted Online.
3.	EMD (if applicable): The tenderer should submit an EMD amount through RTGS/NEFT. The Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will be refunded without any interest to the unsuccessful bidders after the award of contract. Refer to Schedule (at page 1 of this document) for its actual place of submission.
4.	Refund of EMD: The EMD will be returned to unsuccessful Tenderer only after the Tenders are finalized. In case of successful Tenderer, it will be retained till the successful and complete installation of the equipment.
5.	Opening of the tender: The online bid will be opened by a committee duly constituted for this purpose. Online bids (complete in all respect) received along with EMD (if any) will be opened as mentioned at “Annexure: Schedule” in presence of bidders representative if available. Only one representative will be allowed to participate in the tender opening. Bid received without EMD (if present) will be rejected straight way. The technical bid will be opened online first and it will be examined by a technical committee (as per specification and requirement). The financial offer/bid will be opened only for the offer/bid which technically meets all requirements as per the specification, and will be opened in the presence of the vendor’s representatives subsequently for further evaluation. The bidders if interested may participate on the tender opening Date and Time. The bidder should produce authorization letter from their company to participate in the tender opening.
6.	Acceptance/ Rejection of bids: The Committee reserves the right to reject any or all offers without assigning any reason.
7.	Pre-qualification criteria: (i) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed. (ii) An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well. (Ref. Annexure-II) (iii) OEM should be internationally reputed Branded Company. (iv) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting documents etc. may lead to rejection of the bid. (v) In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. (vi) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
8.	Performance Security: The supplier shall require to submit the performance security in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount which is stated at page #1 of the tender document within 21 days from the date of receipt of the purchase order/LC and should be kept valid for a period of 60 days beyond the date of completion of warranty period.
9.	Force Majeure: The Supplier shall not be liable for forfeiture of its performance security, liquidated

	<p>damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.</p> <ul style="list-style-type: none"> ● For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. ● If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
10.	<p>Risk Purchase Clause: In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.</p>
11.	<p>Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following:</p> <ol style="list-style-type: none"> i. Item Nomenclature ii. Order/Contract No. iii. Country of Origin of Goods iv. Supplier's Name and Address v. Consignee details vi. Packing list reference number
12.	<p>Delivery and Documents:</p> <p>Delivery of the goods should be made within a maximum of 08 to 12 weeks from the date of placement of purchase order and the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:</p> <ol style="list-style-type: none"> 1. 4 Copies of the Supplier invoice showing contract number, goods' description, quantity 2. unit price, total amount; 3. Insurance Certificate if applicable; 4. Manufacturer's/Supplier's warranty certificate; 5. Inspection Certificate issued by the nominated inspection agency, if any 6. Supplier's factory inspection report; and 7. Certificate of Origin (if possible by the beneficiary); 8. Two copies of the packing list identifying the contents of each package. 9. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.
13.	<p>Delayed delivery: If the delivery is not made within the due date for any reason, the Committee will have the right to impose penalty 1% per week and the maximum deduction is 10% of the contract value / price.</p>
14.	<p>Prices: The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of taxes & duties shall be clearly indicated. The price should be quoted without custom duty and excise duty, since IIT Delhi is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand.</p>

	<p>In case of imports, the price should be quoted on FOB/FCA origin Airport Basis only. Under special circumstances (eg. perishable chemicals), when the item is imported on CIF/CIP, please indicate CIF/CIP charges separately upto IIT Delhi indicating the mode of shipment. IIT Delhi will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges. At any circumstances, it is the responsibility of the foreign supplier to handover the material to our forwarder at the origin airport after completing all the inland clearing. No Ex- Works consignment will be entertained.</p> <p>“In case of CIF/CIP shipments, kindly provide the shipment information at least 2 days in advance before landing the shipment along with the documents i.e. invoice, packing list, forwarder Name, address, contact No. in India to save penalty/demurrage charges (imposed by Indian Customs) . Otherwise these charges will be recovered from the supplier/Indian Agent.”</p>
15.	<p>Notices: For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.</p> <p>Purchaser: Coordinator, Supercomputing Facility for Bioinformatics and Computational Biology(SCFBio), 3rd Floor, Synergy Building Indian Institute of Technology Hauz Khas, New Delhi - 110016.</p> <p>Supplier: (To be filled in by the supplier) (All supplier's should submit its supplies information as per Annexure-II).</p> <p>_____</p> <p>_____</p>
16.	<p>Progress of Supply: Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:</p> <ol style="list-style-type: none"> 1. Quantity offered for inspection and date; 2. Quantity accepted/rejected by inspecting agency and date; 3. Quantity dispatched/delivered to consignees and date; 4. Quantity where incidental services have been satisfactorily completed with date; 5. Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date; 6. Date of completion of entire Contract including incidental services, if any; and 7. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).
17.	<p>Inspection and Tests: Inspection and tests prior to shipment of Goods and at final acceptance are as follows:</p> <ul style="list-style-type: none"> • After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance. • The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any

	<p>additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.</p> <ul style="list-style-type: none"> • In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser. • Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Supplier.
18.	<p>Resolution of Disputes: The dispute resolution mechanism to be applied pursuant shall be as follows:</p> <ul style="list-style-type: none"> • In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director, Indian Institute of Technology (IIT) Delhi and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order. • In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. • The venue of the arbitration shall be the place from where the order is issued.
19.	<p>Applicable Law: The place of jurisdiction would be New Delhi (Delhi) INDIA.</p>
20.	<p>Right to Use Defective Goods</p> <p>If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.</p>
21.	<p>Supplier Integrity</p> <p>The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.</p>
22.	<p>Training</p> <p>The Supplier is required to provide training to the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.</p>
23.	<p>Installation & Demonstration</p> <p>The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the IITD site of installation, otherwise the penalty clause will be the same as per the supply of materials.</p> <p>In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. IITD will not be liable to any type of losses in any form.</p>
24.	<p>Insurance: For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. In case of orders placed on</p>

	FOB/FCA basis, the purchaser shall arrange Insurance. If orders placed on CIF/CIP basis, the insurance should be up to IIT Delhi.
25.	<p>Incidental services: The incidental services also include:</p> <ul style="list-style-type: none"> ● Furnishing of 01 set of detailed operations & maintenance manual. ● Arranging the shifting/moving of the item to their location of final installation within IITD premises at the cost of Supplier through their Indian representatives.
26.	<p>Warranty:</p> <p>(i) Warranty period shall be (as stated at page #2 of this tender) from date of installation of Goods at the IITD site of installation. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.</p> <p>(ii) The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately within in 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.</p> <p>(iii) The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.</p> <p>(iv) After the warranty period is over, Annual Maintenance Contract (AMC)/Comprehensive Maintenance Contract (CMC) up to next two years should be started. The AMC/CMC charges will not be included in computing the total cost of the equipment.</p>
27.	<p>Governing Language</p> <p>The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.</p>
28.	<p>Applicable Law</p> <p>The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.</p>
29.	<p>Notices</p> <ul style="list-style-type: none"> ● Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address. ● A notice shall be effective when delivered or on the notice's effective date, whichever is later.
30.	<p>Taxes</p> <p>Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, VAT in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.</p>
31.	<p>Duties</p>

	<p>IIT Delhi is exempted from paying custom duty under notification No.51/96 (partially or full) and necessary “Custom Duty Exemption Certificate” can be issued after providing following information and Custom Duty Exemption Certificate will be issued to the shipment in the name of the Institute, (no certificate will be issued to third party): The procured product should be used for teaching, scientific and research work only.</p> <p>a) Shipping details i.e. Master Airway Bill No. and House Airway No. (if exists) b) Forwarder details i.e. Name, Contact No., etc.</p> <p>IIT Delhi is exempted from paying Excise Duty and necessary Excise Duty Exemption Certificate will be provided for which following information are required.</p> <p>b) Quotation with details of Basic Price, Rate, Tax & Amount on which ED is applicable c) Supply Order Copy d) Proforma-Invoice Copy.</p>
32.	<p>Agency Commission: Agency commission if any will be paid to the Indian agent in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in case of Nil commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent.</p>
33.	<p>Payment:</p> <p>(i) For imported items Payment will be made through irrevocable Letter of Credit (LC) Cash Against Documents (CAD)/Against delivery/after satisfactory installation by T.T. Letter of Credit (LC) will be established in favour of foreign Supplier after the submission of performance security. The letter of credit (LC) will be established on the exchange rates as applicable on the date of establishment. For Imports, LC will be opened for 100% FOB/CIF value. 80% of the LC amount shall be released on presentation of complete and clear shipping documents and 20% of the LC amount shall be released after the installation and demonstration of the equipment at the site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation and subject to the production of unconditional performance bank guarantee as specified in Clause 8 of tender terms and conditions.</p> <p>(ii) For Indigenous supplies, 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at IITD in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 9 of tender terms and conditions.</p> <p>(iii) Indian Agency commission (IAC), if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items.</p> <p>(iv) All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.</p>
34.	<p>User list: Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided. (Ref. Annexure-III)</p>
35.	<p>Manuals and Drawings</p> <p>(i) Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.</p> <p>(ii) The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.</p> <p>(iii) Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.</p>

36.	Application Specialist: The Tenderer should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office. (Ref. to Annexure-III)
37.	Site Preparation: The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.
38.	Spare Parts The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier: <ul style="list-style-type: none"> ii. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and iii. In the event of termination of production of the spare parts: iv. Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and v. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested. Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.
39.	Defective Equipment: If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IIT Delhi may consider "Banning" the supplier.
40.	Termination for Default The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part: <ul style="list-style-type: none"> i. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser; or ii If the Supplier fails to perform any other obligation(s) under the Contract. iii If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. <ul style="list-style-type: none"> ● For the purpose of this Clause: <ul style="list-style-type: none"> i. “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. ii. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission)

	<p>designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;”</p> <ul style="list-style-type: none"> ● In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.
41.	<p>Downtime: During the warranty period not more than 5% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 5% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.</p>
42.	<p>Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier’s cost.</p>
43.	<p>Disputes and Jurisdiction: Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within New Delhi.</p>
44.	<p>Compliance certificate: This certificate must be provided indicating conformity to the technical specifications. (Annexure-I)</p>

HPC OEM Eligibility Criteria

1. OEM has to feature in the top 500 supercomputer sites (available at www.top500.org) with at least 10 installations in the **November 2017** (Latest) list & At least five installations in each list published since last three years.
2. OEM should have supplied and installed at least 2 HPC system over 100 TFlops (RPeak) in India
3. OEM should have the capability of the HPC DC design. The documentary proof should be provided by vendor's customers.
4. OEM shall provide factory integration of the entire HPC cluster including appropriately documented factory testing before delivery.
5. The OEM should be a registered company in India should have been in operation in India for a period of at least 10 years as on date of Tender. Copy of the Certificate of Incorporation / registration should be enclosed.
6. Bidder should be OEM/Authorized Partner/service provider of the OEM. In case the tenderer is an Authorized Partner or Service Provider, a valid Agency-ship/Dealership Certificate (MAF specific to this tender) should be given by OEM to quote on behalf of OEM should also be enclosed along with the technical bid.
7. The bidder should also have experienced and skilled service personnel to support above mentioned open source OS/ software's like RedHat Enterprise Linux, CentOS, Intel MPI, Intel FORTRAN & C, AMBER, GROMACS, NAMD, BLAST, HMMER, LAMMPS, VASP, Quantum ESPRESSO, etc.
8. Installation of the major equipment (compute & cooling) to be done by respective OEM only. Entire support has to be only by respective OEM directly.

Miscellaneous/other requirements to be met by the bidder

- a) The bidder shall provide total power and cooling requirements (KVA, Current (amp) rating, socket type, BTU rating, AC tonnage, etc.) for the offered solution at the time of quote. The various subsystem wise and rack-wise power and heat dissipation requirements must also be given.
- b) The proposed set up should be scalable without disturbing/changing the existing configuration. In case of expansion (addition of servers, GPUS, etc in future) the bidder should clearly mention the requirements in the bid for the desired expansion.
- c) The proposal must include a detailed datasheet for every single IT component included in your proposal and the necessary technical whitepapers discussing the features, performance and optimization techniques.

- d) Training for the persons deputed by Customer should be provided on entire solutions implemented (including OS/ Cluster/ Scheduler/ NFS/ user management/ Server management and troubleshooting etc).
- e) The software licensing must be clearly and unambiguously stated and accordingly quoted separately with per unit license cost information.
- f) Bidder/OEM should have the responsibility of providing end to end solution whatever is required to make the solution fully operational and if any component is missing in the given specification it is the responsibility of the bidder to bring it into the notice and then supply and install the missing component.
- g) The OEM/bidder should be responsible to port the programs/codes/software (both in-house developed and public domain softwares which are currently installed on the existing machines/clusters) on the new cluster after the basic installation and configuration of the cluster is done.

Scope of the Work

1. Installation, testing, commissioning and demonstrating the High Performance LINPACK (HPL) and application benchmark job to reproduce the result given at the time of bid submission on the proposed HPC solution is to be done at IIT Delhi during the installation.
2. Benchmarking of HPC system along with performance testing of Lustre file system for the existing storage as per IIT Delhi requirement.
3. Bidder should provide the total BTU and Power rating of the quoted hardware.
4. Bidder should provide details of heat dissipation and cooling requirements.
5. Provide the solution layout; Configuration should be done in such a way to power/cooling system should not create any problem in the future due to bad implementation. Accordingly all the cables should be of appropriate lengths
6. Documentation and Manuals of all systems to be supplied.
7. Entire installation, commissioning, benchmarking and cleanup should be completed within 4 weeks after the delivery of the systems in IIT premises.

Mandatory over all conditions (Must be filled by the bidder)

Description	Compliance	Deviation (if any)
Bid must include a detailed schematic diagram of how the switches, PDUs and other units will fit into the racks and connected.		
Any additional site-preparation requirement must be listed with compliance chart		
Any additional site-preparation requirement must be listed with compliance chart		
All specs are to be with specified clock-rates without any overclocking		
Provision for centralized call and email logging facility. Supplied h/w and s/w to provide 24x7 operations with 4 hrs response time and 1 or 2 working days resolution time from the point of logging the problem. Intimation of any change to email/phone number must be received in writing before the old number/email become non-functional.		
Necessary and sufficient number of spare items of h/w and s/w to meet the above requirement should be maintained at IIT Delhi site. Provide list and quantity of such spare items.		
The bidder should be the single point of contact for supporting all the supplied components		
Supply, installation and integration of all the supplied h/w and s/w to be done by the bidder		
Installation to include cleanly routed, grouped, tied and labelled cables. All nodes to be labelled		
All software must be 64-bit unless specified otherwise in that software section or if such a software is not available in 64-bit mode. Backward compatibility with 32-bit should be maintained wherever applicable		
Wherever applicable all software must be multi-core aware (scalable to two socket sixteen core CPU) and also compatible to		

GPU / Accelerators and Co-processors if required in future.		
Wherever applicable all software must be interoperable with each other and work on quoted OS on quoted hardware.		
All software must be provided on media along with license documents		
Licensing policy of each software must be elaborated		
All software should be provided along with soft copies of documentation		
Consultation support for performance tuning and maintenance for 1 year		
<p>Training for following items to be imparted to at least 3 SCFBio, IIT Delhi members at a mutually acceptable schedule:</p> <ol style="list-style-type: none"> 1. Installation, configuration, operations and management of quoted compute node 2. Installation, configuration, operations and management of quoted Infiniband/OPA networks 3. Installation, configuration, operations and management of OS 4. Usage of all the tools quoted under development tools and MPI 5. Installation, configuration, operations and management of quoted Network Monitoring and Management Tools 6. Installation, configuration, operations, management and application porting (MPI, OPENMP.) of quoted Servers/Processors. 		
The Bidder should guarantee that they will provide extensive documentation of processor architecture, datasheets of various h/w components, details of performance optimization of memory/IO subsystem, etc.		
Bidder should guarantee that the nodes supplied are compatible and work optimally with quoted Infiniband HCAs and quoted Infiniband Switch /Intel Omni Path		

Interconnect.		
The node should support and work with quoted Gigabit, Infiniband/OPA Network Interface Cards along with the existing storage system installed at SCFBio, IIT Delhi.		
Bidder should provide cooling requirements of quoted Compute node like CFM, Max. BTU generation, in flow air temperature etc.		
Bidder should provide minimum and maximum power requirement of quoted compute node (RPS not considered)		
Bidder should provide the full documentation like technical documents as well as user manual for the quoted solution.		
Bidder should provide all the licenses (perpetual) for all the quoted Hardware and Software wherever applicable.		

Warranty and Support Services:

1. The bidder/OEM 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.
2. The hardware supplied must have 3 years onsite comprehensive warranty with 24x7 support along with 4 hours response time and resolution time of 1 or 2 working days (see below), covering all parts & labor starting from the date after the successful installation, demonstration of benchmark performances and acceptance by IIT Delhi. During the warranty period, bidder/OEM will have to undertake comprehensive maintenance of the entire hardware, hardware components, equipment, software support and accessories supplied by the vendor at the place of installation of the equipment.
3. 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 2 working days for individual server and next working day for central components like power supply, networking and storage after the intimation of fault.
4. All the software provided should have support for updates, upgrades and patches during the warranty period.

5. The warranty on all the associated software should cover providing of upgraded version/s, if any, released during the warranty period (i.e. 3 years) free of cost.
6. The OEM/ Bidder should quote for additional 2 years comprehensive AMC, which could also be a considering factor.
7. The bidder/OEM shall be responsible to ensure adequate supply of spare parts for a minimum period of 2 years after the expiry of the warranty period (i.e., 3 +2 years), under their annual maintenance and repairs rate contract or otherwise. Undertaking of the same shall be provided by the supplier.
8. Goods requiring warranty replacements must be replaced on free of cost basis to IIT Delhi.
9. Warranty shall not become void if IIT Delhi buys any other supplemental hardware from a third party and installs it with/in these machines. However warranty provided by the OEM/bidder/supplier shall not be applicable to such hardware items installed.
10. The bidder/OEM should provide at least next business day response with prompt problem resolution with complete back to back SLA with the HPC OEM.
11. The bidder/OEM shall undertake to provide any software assistance to the users of the HPC clusters including installations of the requested softwares, libraries, tools etc, as and when required during the period of the contract.
12. The bidder/OEM shall ensure access to 24 x 7 online support for 3 years from Technical Assistance Center of OEM/bidder for resolution of problems with the help of online tools and technical assistance.

Benchmarks

Details regarding the benchmarks:

- ❖ Vendors need to unzip-untar input file decks for all benchmarks, i.e. GROMACS, LAMMPS, Quantum Espresso and VASP. These files will be available at [www.scfbio-iitd.res.in/HPC-Benchmark Files](http://www.scfbio-iitd.res.in/HPC-Benchmark-Files)
- ❖ Application benchmarking measurements should be made purely on CPU cores and should be done on the same configurations and specs as asked in this tender on 1, 2, 4 and 8 nodes.
- ❖ Results should be submitted along with technical bid.
- ❖ Log files of benchmark runs in electronic format must be provided. No hard copies will be accepted.
- ❖ All the output and run input files along with the script should be provided.
- ❖ Complete details of the runtime environment should be provided.
- ❖ Details of all application installation used to run the program should be provided.
- ❖ The script used to run the job should be provided.
- ❖ An undertaking that guarantees the reproduction of the benchmark data on the proposed cluster in our premises after final installation must be provided. In case of failing to do so (with maximum 5% deviation from the results submitted in the bid), SCFBio, IIT Delhi reserves the right to deduct 10% from the payment.
- ❖ Complete hardware and software environment details of the machine on which the benchmarks were carried out, must be provided.
- ❖ All cores present in each node must be used in running the benchmarked jobs.
- ❖ If the benchmarking was carried out on a system containing X cores per node, the proposed solution too must contain the same number of cores per node.
- ❖ The benchmarks should be run with turbo mode off. Vendors can employ architecture-specific code enhancements (for instances compiler flags) during benchmarking, however, these must be transparently mentioned in their proposals and relevant electronic files (Make file etc.) used in the benchmarks must be shared.
- ❖ The bidder/OEM can run the benchmark. The bidder/OEM should provide an undertaking certifying that they have done the benchmark themselves.

Benchmark Criteria:

The bidder should carry out below listed bench mark programs:

1. HPL benchmark (source <http://www.netlib.org/benchmark/hpl/>).
2. STREAM 'TRIAD' (source <http://www.cs.virginia.edu/stream/FTP/Code/>).
3. GROMACS benchmark (source www.gromacs.org).
4. LAMMPS benchmark (source <http://lammps.sandia.gov/>).
5. VASP benchmark (source <https://cms.mpi.univie.ac.at/vasp/vasp/vasp.html>).
6. Quantum ESPRESSO (source <http://www.quantum-espresso.org/>).

For application benchmarks input files in tar, zipped form may be obtained from SCFBio IIT Delhi at the link mentioned above.

Please unzip and untar the files and follow the Instructions carefully.

- For the HPL benchmark, we will look into the ratio of the R_{\max} (sustained) vs. R_{peak} (theoretical peak).
- For the GROMACS, LAMMPS, VASP and QE benchmarks, the scalability will be measured in terms of speed up achieved (S) and for efficiency; we will consider the wall time required for completion of the jobs with the maximum number of nodes.
- Speed up achieved (S) will be defined using the following formula:

$$S = \frac{\text{Wall time required for completion of job with 1 nodes}}{\text{Wall time required for completion of job with } x \text{ nodes}}, x \geq 2$$
 The vendors must give a plot of S vs. x. They should also plot S for the case of ideal scaling.

For deciding the best scaling we will consider the value of S for the largest value of x.

A two-step criterion will be used for evaluating the benchmark results submitted by bidders/vendors.

(a) Best performance of HPL (on complete solution) and STREAM (each individual node) benchmarks.

(b) If (a) is satisfied, the benchmarks for GROMACS, LAMMPS, VASP and QE will be considered. Vendors will be considered further for benchmark scalability and efficiency. Those vendors whose benchmark results are within 20% of the best one will be deemed suitable to clear the benchmark stage of the Technical bid.

COMPLIANCE SHEETS

ELIGIBILITY COMPLIANCE SHEET

Sl. No.	Requirement	Details of Certification Enclosed (YES/NO)
1.	EMD INR 4,00,000/	
2.	Current Manufacturer's Authorization Letter/OEM/Dealer with guarantee of back-end support specific to this tender	
3.	The copy of audited financial reports/IT returns for the last three financial years indicating the annual sales turnover required for eligibility criteria.	
4.	Product Literature / Information Brochure	
5.	Supply orders for installations as stipulated in HPC OEM Eligibility Criteria mentioned above.	
6.	Copies of Last 3 financial Years duly certified, indicating details of Order Value executed.(Enclose Proof)	
7.	Pertaining to items like storage components, networking components and components other than servers, a specific authorization letter from the respective principal/s clearly indicating that the principal will provide all necessary service / support both through the bidder and directly to IIT Delhi, towards achieving performance and acceptance criteria as stipulated in this document, if and when required.	
8.	An authority letter issued by the competent authority authorizing the signatory to sign on behalf of the bidder.	
9.	A photocopy of the commercial bid without prices (prices blocked) and copy of commercial terms & conditions (in details) as attached in the commercial bid.	
10.	Undertaking to the effect that an irrevocable INR Performance Bank Guarantee (PBG) of 10% of the order value will be submitted within 21 days from the date of receipt of the order/LC. The PBG must be valid for a period of 60 days beyond the date of completion of the final warranty period.	
11.	Certificate of Incorporations	
12.	Registration Certificate	
13.	Company Profile 13	
14.	PAN	
15.	GST CERTIFICATE	
16.	Methodology of Warranty Support	

TECHNICAL COMPLIANCE SHEET

A) Master Node

Sl. No.	Technical Specifications	Compliance	Model No.	Deviation (if any)
1.	Make / Model Name: The system should be quoted with BOM and part codes. All the part codes should be from the same OEM			
2.	2 x Intel Xeon Gold (Skylake) 6130 16C 2.10 GHz			
3.	Form Factor: Rack mount Server 1U			
4.	Memory: 96 (12 x 8 GB DIMM) GB Registered DDR4-2666 R ECC, in balanced configuration as per recommendation by Intel			
5.	Memory Features and scalability: Advanced ECC, SDDC (Chipkill™), Rank sparing, Memory Mirroring			
6.	HDD: 1 x SSD SATA 6G 150GB or higher internal, should be supplied with external JBOD having 4 x 8 TB or more, Helium filled 7.2 K RPM, SATA disks, 2 x I/O modules, JBOD should have 12 disk enclosure for redundancy, redundant power supply, 12 Gbps SAS connectivity to master node. JBOD should support scalability up to 48 x 3.5 " drives. JBOD, compute & Master node should be from same OEM.			
7.	RAID Controller: Raid support for - RAID Levels 0, 1, 10, 5, 50 for JBOD			
8.	Ethernet ports: The system should have at least 4 x 1 Gbit/s ethernet ports			

9.	Expansion: 4 PCIe 3.0 slots, at least 2 PCIe 3.0 x16 slots			
10.	Noise level: max upto 55 db, ISO 7779			
11.	Management: OEM Server Management Suite, Integrated remote management controller should support graphical console redirection and remote media redirection. Any licence for server management and KVM redirection should be included for warranty period years.			
12.	Power Supply: Redundant Hot Swap power supply (N+1)			
13.	OS: Cent OS/ RHEL			
14.	Warranty: 3 years OEM comprehensive onsite warranty. The OEM should have Service setup in India.			
15.	Global compliance: CB, RoHS, WEEE, CE			

B) Compute Nodes (23 or more)

Sl. No.	Technical Specifications	Compliance	Model No.	Deviation (if any)
1.	Make / Model Name: The system should be quoted with BOM and part_codes. All the part_codes should be from the same OEM			
2.	2 x Intel Xeon Gold (Skylake) 6130 16C 2.10 GHz			
3.	Form Factor: Rack mount chassis Maximum 2U; Maximum 4 servers in 2U.			
4.	Memory: 96 (12 x 8 GB DIMM) GB Registered DDR4-2666 R ECC, in balanced configuration as per recommendation by Intel			
5.	Memory protection: Advanced ECC, SDDC			

6.	HDD: 1 x SSD , 6 Gb/s, 256 GB or more			
7.	Communication ports: 2 x 10/100/1000 Mbit/s Ethernet, 1 x EDR / 1 x Omni Path			
8.	Noise level: max upto 55 db, ISO 7779			
9.	Management: OEM Server Management Suite, Integrated remote management controller should support graphical console redirection and remote media redirection. Any licence for server management and KVM redirection should be included for warranty period years.			
10.	Power Supply: Redundant Hot Swap power supply (N+1)			
11.	OS: Cent OS/ RHEL			
12.	Warranty: 3 years OEM comprehensive onsite warranty. The OEM should have Service setup in India.			
13.	Global compliance: CB, RoHS, WEEE, CE			

C) Fat Compute Node (High Memory) – Qty 01

Sl. No.	Technical Specifications	Compliance	Model No.	Deviation (if any)
1.	Make / Model Name: The system should be quoted with BOM and partcodes. All the part codes should be from the same OEM			
2.	Form Factor: Maximum 2U			
3.	Processor: 2 x Intel Xeon Gold 6148 (20 Cores/Socket)			
4.	Memory: 512 GB (All DIMM slots should be populated) Registered			

	DDR4-2666 R ECC, in balanced configuration			
5.	Memory protection: Advanced ECC, SDDC			
6.	HDD: 1 x SSD , 6 Gb/s, 256 GB or more			
7.	Communication ports: 2 x 10/100/1000 Mbit/s Ethernet, 1 x EDR/OPA			
8.	Noise level: max upto 55 db, ISO 7779			
9.	Management: OEM Server Management Suite, Integrated remote management controller should support graphical console redirection and remote media redirection. Any license for server management and KVM redirection should be included for warranty period years.			
10.	Power Supply: Redundant Hot Swap power supply (N+1)			
11.	Warranty: 3 years OEM comprehensive onsite warranty. The OEM should have Service setup in India.			
12.	Global compliance: CB, RoHS, WEEE, CE			
13.	OS: CentOS			

D) I/O Nodes: Qty 2

Sl. No.	Technical Specifications	Compliance	Model No.	Deviation (if any)
1.	2 x Intel Xeon Silver 4114 10C @2.20 GHz			
2.	Chipset: Intel C610 chipset family			
3.	Form Factor: Rack mount Server 1U			

4.	Memory: 64(8 x 8 GB DIMMS) GB DDR4 Registered ECC			
5.	Memory Features and: Advanced ECC, SDDC (Chipkill™), Rank sparing, Memory Mirroring support 24 DIMM slots scalability			
6.	HDD: 2 x HD SAS 12G 1.8TB 10K 512e HOT PL 2.5' EP support for 8 x 2.5" drives			
7.	RAID Controller: Raid support for – RAID Levels 0, 1, 10, 5, 50			
8.	HBA: 4 x 8Gbps HBA with 5mts cables			
9.	ODD: DVD RW			
10.	Ethernet ports: The system should have at least 4 x 1 Gbit/s Ethernet ports			
11.	Expansion: 4 PCIe 3.0 slots, at leaset 2 PCIe 3.0 x16 slots			
12.	Fans: Redundant Hot Swap Fans			
13.	OS: Cent OS/ RHEL			
14.	Warranty: 3 years OEM comprehensive onsite warranty. The OEM should have Service setup in India.			
15.	Power Supply: Redundant Hot Swap power supply			
16.	Noise level: max upto 55 db, ISO 7779			
17.	Global compliance: CB, RoHS, WEEE, CE			
18.	Management: OEM Server Management Suite, Integrated remote management controller with dedicated 1GbE port, should support graphical console redirection and remote media redirection. Any licence for server management and KVM redirection should be included for 3 years.			

E) Connectivity

Sl. No.	Technical Specifications	Compliance	Model No.	Deviation (if any)
1	Interconnect with 100 Gbps connection speed with at least 36 ports (Mellanox EDR/ Intel Omni Path) Switch in 100% non blocking architecture, with required number of cables of appropriate length.			
2	1 x GigE 48 ports network switch along with required numbers of CAT6 molded Cables of appropriate length to suite the solution			

F) Cooling Solution

Sl. No.	Technical Specifications	Compliance	Model No.	Deviation (if any)
1.	Bidder has to provide Chiller water based cooling such that it can cater 35 KW IT load in a single rack .			
2.	Single Housing rack with attached cooling equipment for supplied IT equipment to be provided by bidder. One rack should take load of 35 KW or more. Cooling solution attached to single rack should be in redundancy.			
3.	All the systems asked above should be fit in single rack.			
4.	IIT Delhi CoE for Bioinformatics has space constraint, and hence we are looking for highly optimized solution in such a way that 35 KW load should be fit in a single rack. Cooling solution			

	to cater 35 KW in redundancy should be provided.			
5.	Water chilled based cooling should be designed in such a way , that it can be expanded in future to add another 20 KW IT (in same or in additional rack) load without removing the existing supplied infrastructure.			
6.	One Rack to cater 35 KW loads. All required PDU and power cables to be provided.			
7.	Cooling solution should be fully redundant.			
8.	The design of the cooling unit should be optimized for use in data centres. The integrated water heat exchanger should guarantee a cooling output of to 35 KW.			
9.	The heat exchanger / cooling pumps should be mounted on the side of the Rack in redundancy.			
10.	The high-performance cooling solution should guarantee maximum cooling output (to cater 35 KW) even at high water inlet temperatures (upto 15 deg celsius).			
11.	In case of power outage such as chiller and air conditioner stops in this situation ICT equipment must run under safe operating temperature for 15 minutes minimum without UPS and Generator or any power backup. Monitoring - Abnormal Temp, Abnormal Pressure, Leaking Coolant, Humidity. If somehow the cooling system gets broken, the			

	cooling system should report incident remotely.			
12.	Remote online monitoring of cooling system			
13.	Humidity monitoring and control system to avoid dew drops.			
14.	System should be such that servers should be operating from humidity level 5~95 % RH.			
15.	Power strips in rack should be supplied in such a way to take care 35 KW IT load.			

Sl. no.	List of optional items	Compliance Y/N
1.	AMC charges for 4 th and 5 th year to be mentioned for the quoted solution.	

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

Signature of Bidder

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

**<< Organization Letter Head >>
DECLARATION SHEET**

We, _____ hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

The prices quoted in the financial bids are subsidized due to academic discount given to IIT Delhi.

We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.	NAME & ADDRESS OF THE Vendor/ Manufacturer / Agent
1 Phone	
2 Fax	
3 E-mail	
4 Contact Person Name	
5 Mobile Number	
6 TIN Number	
7 PAN Number	
(In case of on-line payment of Tender Fees)	
8 UTR No. (For Tender Fee)	
(In case of on-line payment of EMD)	
9 UTR No. (For EMD)	
10 Kindly provide bank details of the bidder in the following format:	
a) Name of the Bank	
b) Account Number	
c) Kindly attach scanned copy of one Cheque book page to enable us to return the EMD to unsuccessful bidder	

(Signature of the Tenderer)

Name:

Seal of the Company

List of Govt. Organization/Deptt.

List of Government Organizations for whom the Bidder has undertaken such work during last three years (must be supported with work orders)		
Name of the organization	Name of Contact Person	Contact No.

Name of application specialist / Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.		
Name of the organization	Name of Contact Person	Contact No.

Signature of Bidder

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

Bid Submission

Online Bid Submission:

The Online bids (complete in all respect) must be uploaded online in **two** Envelops as explained below:-

Envelope – 1 (Following documents to be provided as single PDF file)			
Sl. No.	Document	Content	File Types
1.	Technical Bid	Compliance Sheet as per Annexure - I	.PDF
2.		Organization Declaration Sheet as per Annexure - II	.PDF
3.		List of organizations/ clients where the same products have been supplied (in last two years) along with their contact number(s). (Annexure-III)	.PDF
4.		Technical supporting documents in support of all claims made at Annexure-I (Annexure-IV)	.PDF
Envelope – 2			
Sl. No.	Document	Content	File Types
1.	Financial Bid	Price bid should be submitted in PDF format.	.PDF

**<Department/Centre Name>
Indian Institute of Technology Delhi
Hauz Khas, New Delhi-110016**

Date: XX/XX/XXXX

Subject:Purchase of <Item> (Following format is used for imported items)

S. No.	Currency	Description and Specification of the Item	Qty. in Units	Unit Price (a)	Agency Commission (If applicable) (b)	Discount (c)	Ex-works price (d=a+b-c)	Packing + Handling + DOC + Inland Freight + FCA Charges (e)	FOB/FCA Airport Price (f=d+e)	Insurance + Freight (g)	CIF Price (f+g)
1											

Note: At any circumstances, it is the responsibility of the foreign supplier to hand over the material to our forwarder at the origin airport after completing all the inland clearing.No Ex-works consignment will be entertained.

For indigenous items please quote as per following format.

S. No.	Description and Specification of the Item	Qty. in Units	Unit Price in Rs.	GST%	Total Price in Rs.
1.					
2.					

Note: The above financial template should be strictly followed. Any deviation from the above template (in terms of description and specification of the item) may lead to cancellation of the tender.