
	Government eProcurement System	eProcurement System Government of India																		
Tender Details		Date : 13-Nov-2024 05:33 PM																		
 Print																				
Basic Details																				
Organisation Chain	Indian Institute of Technology Ropar																			
Tender Reference Number	1870-23																			
Tender ID	2024_IITRP_834843_1	Withdrawal Allowed	Yes																	
Tender Type	Limited	Form of contract	Buy																	
Tender Category	Goods	No. of Covers	2																	
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No																	
Payment Mode	Offline	Is Multi Currency Allowed For BOQ	Yes																	
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No																	
Payment Instruments		Cover Details, No. Of Covers - 2																		
Offline	<table><tr><th>S.No</th><th>Instrument Type</th></tr><tr><td>1</td><td>R-T-G-S</td></tr><tr><td>2</td><td>NEFT</td></tr></table>	S.No	Instrument Type	1	R-T-G-S	2	NEFT	<table><tr><th>Cover No</th><th>Cover</th><th>Document Type</th><th>Description</th></tr><tr><td>1</td><td>Fee/PreQual/Technical</td><td>.pdf</td><td>SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR</td></tr><tr><td>2</td><td>Finance</td><td>.xls</td><td>SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR</td></tr></table>	Cover No	Cover	Document Type	Description	1	Fee/PreQual/Technical	.pdf	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR	2	Finance	.xls	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR
S.No	Instrument Type																			
1	R-T-G-S																			
2	NEFT																			
Cover No	Cover	Document Type	Description																	
1	Fee/PreQual/Technical	.pdf	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR																	
2	Finance	.xls	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR																	
Tender Fee Details, [Total Fee in ₹ * - 0.00]		EMD Fee Details																		
Tender Fee in ₹	0.00	EMD Amount in ₹	8,00,000																	
Fee Payable To	Nil	EMD Exemption Allowed	Yes																	
Tender Fee Exemption Allowed	No	EMD Fee Type	fixed																	
		EMD Payable To	IIT ROPAR REVENUE ACCOUNT																	
		EMD Percentage	NA																	
		EMD Payable At	ROPAR																	
Foreign Currency BOQ Details																				
S.No	Currency	Conversion rate in ₹																		
1	US Dollar	NA																		
2	European Euro	NA																		
3	British Pound	NA																		
4	Australian Dollar	NA																		
5	Swiss Franc	NA																		
6	Japanese yen	NA																		
7	Canadian Dollar	NA																		
8	Singapore Dollar	NA																		
Work /Item(s)																				

Title	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR				
Work Description	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	Shri C D Balaji - cdbalaji@gmail.com Shri Vechatbhai Motibhai Pargi - vmpargi1659@gmail.com				
Tender Value in ₹	NA	Product Category	Computer- Data Processing	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	180	Period Of Work (Days)	45
Location	IIT ROPAR	Pincode	140001	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	IIT ROPAR
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

Critical Dates

Publish Date	13-Nov-2024 05:00 PM	Bid Opening Date	11-Dec-2024 03:30 PM
Document Download / Sale Start Date	13-Nov-2024 05:00 PM	Document Download / Sale End Date	11-Dec-2024 03:00 PM
Clarification Start Date	13-Nov-2024 05:00 PM	Clarification End Date	04-Dec-2024 11:00 AM
Bid Submission Start Date	13-Nov-2024 05:00 PM	Bid Submission End Date	11-Dec-2024 03:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description		Document Size (in KB)
	1	Tendernotice_1.pdf	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR		2834.97
Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	BOQ	BOQ_877361.xls	SUPPLY AND INSTALLATION OF HIGH PERFORMANCE COMPUTING FACILITY AT IIT ROPAR	313.00
	2	Tender Documents	HPCIITRPR2024.pdf	SUPPLY AND INSTALLATION OF HIGH PERFROMANCE COMPUTING FACILITY AT IIT ROPAR	2819.59

Tender Inviting Authority

Name	REGISTRAR
Address	IIT ROPAR



भारतीय प्रौद्योगिकी संस्थान रोपड़
INDIAN INSTITUTE OF TECHNOLOGY ROPAR
रूपनगर, पंजाब-140001/ Rupnagar, Punjab-140001
Ph. 01881-231285, 231288, e-mail: purchase@iitrpr.ac.in

File No.1870-23/CH-10033/INSTT/GTE/PS

Dated: 13-11-2024

भारतीय प्रौद्योगिकी संस्थान रोपड़ निम्नलिखित मदों की खरीद की प्रक्रिया में है।

Indian Institute of Technology Ropar is in the process of purchasing following item(s) as per details as given as:-

मद का विवरण Details of the item	Limited Tender for Supply and Installation of High Performance Computing (HPC) Facility at IIT Ropar
बयाना जमा करने के लिए जमा राशि Earnest Money Deposit to be submitted	Rs. 8,00,000/-
वितरणसमय-सारणी Delivery Schedule	As per Tender

निविदा दस्तावेज केंद्रीय 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 'आनलाइन बोली के निर्देश' पर दिए गए निर्देशों के माध्यम से जाने की सलाह दी जाए।

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'.

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 रोपड़ 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> पूरा निविदा दस्तावेज अगले पृष्ठ में दिए गए कार्यक्रम के अनुसार आनलाइन जमा करें।

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 Ropar 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.

कोई मैन्युअल बोली स्वीकार नहीं की जाएगी। सभी कोटेशन (दरसूची) (तकनीकी और वित्तीय दोनों को ई-प्रोक्योरमेंट पोर्टल में जमा करनी चाहिए)।
No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the E-procurement portal).

(कुलसचिव /Registrar)

SCHEDULE		
Name of Organization	Indian Institute of Technology Ropar	
Tender Type (Open/Limited/EOI/Auction/Single/Global)	Limited GTE	
Tender Category (Services/Goods/works)	Goods and Services	
Type/Form of Contract (Work/Supply/Service/Buy/Empanelment)	Supply and Installation	
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems/Lab Equipment)	Lab Equipment	
Date of Issue/Publishing	13-11-2024 (17:00Hrs)	
Document Download/Sale Start Date	13-11-2024 (17:00Hrs)	
Document Download/Sale End Date	11-12-2024 (15:00 Hrs)	
Last Date and Time for Uploading of Bids	11-12-2024 (15:00 Hrs)	
Date and Time of Opening of Technical Bids	11-12-2024 (15:30 Hrs)	
Tender Fee / EMD	Rs. <u> </u> NIL <u> </u> /- (For Tender Fee) Rs. 8,00,000/- (For EMD)	
	(To be paid through RTGS/NEFT/BG). IIT Ropar Revenue Account Bank details are as under:	
	Name of the Bank A/C	: IIT Ropar Revenue Account
	SBI A/C No.	: 37360100716
	Name of the Bank	: State Bank of India
	IFSC Code	: SBIN0013181
	MICR Code	: 140002008
	(This is mandatory that UTR Number is provided in the on- line quotation/bid. Vendors can use their bank's format for the BG. Ensure that the original BG reaches the specified *address before the tender due date.)	
No. of Covers (1/2/3/4)	2	
Bid Validity days (180/120/90/60/30)	180 days (From last date of opening of tender)	
*Address for Communication	Assistant Registrar, Store & Purchase, Room no 220, M. Visvesvaraya Block, Indian Institute of Technology Ropar, Rupnagar – 140001	
Contact No.	01881-231285,89	
Email Address	purchase@iitrpr.ac.in , ar.sp@iitrpr.ac.in	
IEM Details	Shri C D Balaji - cdbalaji@gmail.com Shri Vechatbhai Motibhai Pargi - vmpargi1659@gmail.com	

Registrar

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

व्यय विभाग के निर्देशों के अनुसार, यह निविदा दस्तावेज केंद्रीय सार्वजनिक प्रापण पोर्टल (यूआरएल: [URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) पर प्रकाशित किया गया है। बोलीदाताओं को मान्य डिजिटल हस्ताक्षर प्रमाणपत्र 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 तात्पर्य है, सीपीपी पोर्टल पर आवश्यकताओं के अनुसार अपनी बोलियां तैयार करें और अपनी बोलियां आनलाइन जमा करें।

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.

अधिक जानकारी सीपीपी पोर्टल पर आनलाइन बोलियां जमा करने के लिए उपयोगी हो सकती है।

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

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

पंजीकरण / REGISTRATION

- 1) बोलीदाताओं को “नामांकन के लिए यहां क्लिक करें” लिंक पर क्लिक करके सेंट्रल पब्लिक प्रोक्युरमेंट पोर्टल (यूआरएल: <http://eprocure.gov.in/eprocure/app>) के ई-प्रोक्योरमेंट मोड्यूल पर भर्ती करना आवश्यक है। सीपीपी पोर्टल पर नामांकन निःशुल्क है।

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.

- 2) 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।

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

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

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.

- 4) 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 सीफी/टीसीएस/एनकोड/ई-मुद्रा आदि), इनके प्रोफाइल के साथ

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.

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

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.

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

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

निविदा दस्तावेजों के लिए खोजना / **SEARCHING FOR TENDER DOCUMENTS/**

- 1) सीपीपी पोर्टल में निर्मित विभिन्न खोज विकल्प हैं, ताकि बोलीदाओं 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।

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.

- 2) 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 निविदाएं” फोल्डर 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 की गई है।

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.

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

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.

बोली की तैयारी / **PREPARATION OF BIDS**

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

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

- 2) कृपया बोली के भाग के रूप में जमा किए जाने वाले दस्तावेजों को समझन 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।

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.

- 3) 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।

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.

- 4) 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 प्रमाणपत्र आदि) बोलीदाताओं को प्रदान किया गया है। ऐसे दस्तावेजों को अपलोड करने के लिए बोलीकर्ता उनके लिए उपलब्ध “मेरा स्पेस” क्षेत्र उपयोग कर सकते हैं। बोली जमा करते समय ये दस्तावेज सीधे “मेरा स्पेस” क्षेत्र में जमा किए जा सकते हैं, और उन्हें बार-बार अपलोड करने की आवश्यकता नहीं है इससे बोली जमा प्रक्रिया के लिए आवश्यक समय में कमी आएगी।

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.

बोली जमा करना / SUBMISSION OF BIDS

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

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.

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

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

- 3) बोलीदाता को निविदा शुल्क/ ईएमडी को भुगतान के लिए “आन 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 आन लाइन पर भुगतान करने की आवश्यकता होती है।

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, an EMD / Tender fee is sought, bidders need to pay the tender fee and EMD separately on-line through RTGS.

- 4) 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 BoQफाइल 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 आनलाइन जमा करना होगा, बिना फाइल नाम बदलें। यदि BoQफाइल को बोलीदाता द्वारा संशोधित किया गया है, तो बोली को खारिज कर दिया जाएगा।

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.

- 5) 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।

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.

- 6) 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 अनाधिकृत 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।

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.

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

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

- 8) बोलियों के सफल और समय पर जमा होने पर, पोर्टल सभी प्रासंगिक विवरणों के साथ बोली संख्या, बोली जमा करने की तारीख और समय के साथ बोली सफलतापूर्वक जमा करने का संदेश एवं बोली सारांश प्रदर्शित करेगा।

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.

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

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

बोलीदाताओं को सहायता / ASSISTANCE TO BIDDERS

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

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.

- 2) आनलाइन बोली प्रस्तुत करने अथवा सामान्य में सीपीपी पोर्टल से संबंधित प्रश्नों की प्रक्रिया से संबंधित कोई भी प्रश्न 24x7सीपीपी पोर्टल हैल्पडेस्क पर निर्देशित किया जा सकता है। हैल्पडेस्क के लिए संपर्क संख्या 1800 233 7315 हैं।

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.

बोलीदाताओं के लिए समान्य निर्देश / General Instructions to the Bidders

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

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.

- 2) कंपनी के नाम में स्मार्ट कार्ड/ई-टोकन के रूप में मान्य क्लास II/III डिजिटल हस्ताक्षर प्रमाणपत्र (डीएससी) के पंजीकरण के लिए एक शर्त है और <https://eprocure.gov.in/eprocure/app> के माध्यम से बोली प्रस्तुत करने की गतिविधियों में भाग ले सकते हैं। डिजिटल हस्ताक्षर प्रमाणपत्र पर 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।

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”.

- 3) निविदाकर्ता को सलाह दी जाती है कि <https://eprocure.gov.in/eprocure/app> पर ई-प्रोक्योरमेंट के लिए सेंट्रल पब्लिक प्रोक्योरमेंट पोर्टल माध्यम से आनलाइन बोली के जमा करते समय निविदाकार हेतु निर्देशों में उपलब्ध निर्देशों का अनुगमन करें।

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

प्रश्न प्रस्तुत करने का प्रारूप:

Format for Query submission:

1. Name of Organization:
2. Mobile No. of authorized person:
3. Email ID of the authorized person:

S. No.	Page No.	Clause No.	Reference/Subject	Clarification Sought

भारतीय प्रौद्योगिकी संस्थान रोपड़

INDIAN INSTITUTE OF TECHNOLOGY
ROPAR



**Limited Tender for “HPC facility with 60TF
Sustained Performance from Compute Nodes” at
IIT Ropar**

Detailed Specifications and Terms and Conditions

IIT Ropar is looking for HPC facility with 60TF sustained performance from compute nodes only. Bidder must submit HPL benchmark for 60TF sustained throughput, PFS storage with 750 TB usable capacity and 8 GBps throughput must offered. The detailed Specifications and Terms and Conditions are listed below:

Summary

- A. Master Nodes - 2 (HA Pair)
- B. Compute Node- Sustained 60 Tera Flops
- C. High Memory Nodes – 2 Nodes
- D. MDS Nodes (2 Nodes) & OSS Nodes (2 Nodes)
- E. Interconnect-
 - a) Primary- 100 GBps IB interconnect-1
 - b) Secondary- 2x 1 GBps Interconnect-2
- F. PFS Storage- 750 TB with 8 GBps read/write throughput
- G. Cluster Management software – Open Source
- H. Job scheduler software – Open Source
- I. Bidder/OEM Eligibility Criteria
- J. General Clauses
- K. Benchmark, Scope and Support
- L. Bill of Materials

Technical Specifications

A. Technical Specifications for Master/Login Node – Quantity: 02	
S No	Specification
1	Form Factor/Height: 2U Rack Server or Lesser
2	Processors: Dual processor, with minimum 2.5 TF per node, processor should be 64-bit latest generation Intel/AMD.
3	Memory: Min. 32x DIMM slots, should support 4800MHz/5600 MHz, should be configured with 256 GB DDR5 registered ECC DDR5 DIMMs only.
4	Minimum Core count and Frequency per node: For Intel option, each of the CPU sockets should be with a minimum of 32 cores and minimum 2.5GHz frequency. For AMD option, it should be with a minimum of 64 cores and minimum 2.0 GHz frequency.
5	Expansion Slots: Up to 8x PCIe3.0 Gen 4 or Gen 5
6	Drive Bays: Should support up to 24x SFF hot swap bays with 8 x NVME drives support. Should be supplied with 2x 960GB SSD/M.2 Drives (RAID1) for OS.
7	HBA/RAID Support: should support RAID 0,1,5,6 or equivalent, should be offered with RAID 1 for OS drives.
8	Security & Availability Features: TPM1.2/2.0; PFA; hot-swap & should support redundant drives, fans, and PSUs, 10-35°C continuous operation; Root of trust hardware or equivalent for security
9	Network Interface: 1x 100 GBps Non-Blocking InfiniBand Port and 2x 1 GBps ports.
10	Power: 2x hot swap redundant 80 PLUS Platinum
11	System Management: Remote GUI management tool to Gather and viewing system information and inventory, monitor system status and health, alert notification, update system firmware, real time server Systems Management, capture video display content when Operating system is in halt condition. Can be Integrated as single GUI for management of other devices of same OEM like storage, switches etc.
12	Regulatory compliance: FCC/UL/CSA/VCCI/CCC/IEC

B. Technical Specifications for Compute Nodes: 60 TF or Greater (Sustained)-Quantity- As required	
S. No	Specification
1	Form Factor/Height: 2U Rack Server or Lesser
2	Processors: Dual processor, with minimum 4 TF per node, processor should be 64-bit latest generation Intel/AMD.
3	Memory: 32x DIMM slots, should support 4800MHz/5600 MHz, should be configured with 256 GB DDR5 registered ECC DDR5 DIMMs only.
4	Minimum Core count and Frequency per node: For Intel option, each of the CPU sockets should be with a minimum of 32 cores and minimum 2.5GHz frequency. For AMD option, it should be with a minimum of 64 cores and minimum 2.0 GHz frequency.
5	Expansion Slots: Up to 8 x PCIe3.0 Gen 4 or Gen 5
6	Drive Bays: Should support up to 8 x SFF hot swap bays with NVME drive support. Should be supplied with 2x 480GB SSD/M.2 Drive (RAID1)
7	HBA/RAID Support: should support RAID 0,1,5,6 or equivalent should be offered with RAID 1 for OS drives.
8	Security & Availability Features: TPM1.2/2.0; PFA; hot-swap & should support redundant drives, fans, and PSUs, 10-35°C continuous operation; Root of trust hardware or equivalent for security

9	Network Interface: 1 x 100 GBps Non-Blocking Infini Band Port and 2x dedicated 1 GBps port
10	Power: 2x hot swap redundant 80 PLUS Platinum
11	Compute Chassis: The chassis should be configured with completely Redundant Power Supplies (N+N) and redundant fans. Failure of half of the Power supplies should not throttle the Compute nodes. Individually serviceable compute nodes, power supplies and fans are preferred.
12	Systems Management: Systems Management inventory, monitor system status and health, alert notification, update system firmware, real time server Systems Management, capture video display content when Operating system is in halt condition. Can be Integrated as single GUI for management of other devices of same OEM like storage, switches etc.
13	Regulatory compliance: FCC/UL/CSA/VCCI/CCC/IEC

C. Technical Specifications for High Memory Compute Nodes – Quantity: 02

S. No	Specification
1	Form Factor/Height: 2U Rack Server or Lesser
2	Processors: Dual processor, with minimum 4 TF per node, processor should be 64-bit latest generation Intel/AMD.
3	Memory: 32x DIMM slots, should support 4800MHz/5600 MHz, should be configured with 1024 GB DDR5 registered ECC DDR5 DIMMs only.
4	Expansion Slots: Up to 8x PCIe3.0 Gen 4 or Gen 5
5	Drive Bays: Should support up to 8xSFF hot swap bays with NVME drive support. Should be supplied with 2x 480GB SSD/ M.2 Drive (RAID1)
6	HBA/RAID Support: should support RAID 0,1,5,6 or equivalent should be offered with RAID 1 for OS drives.
7	Security & Availability Features: TPM1.2/2.0; PFA; hot-swap & should support redundant drives, fans, and PSUs, 10-35°C continuous operation; Root of trust hardware or equivalent for security
8	Network Interface: 1 x 100 GBps Non-Blocking Infini Band Port and 2x dedicated 1 GBps port
9	Power: 2x hot swap redundant 80 PLUS Platinum
10	Systems Management: Systems Management inventory, monitor system status and health, alert notification, update system firmware, real time server Systems Management, capture video display content when Operating system is in halt condition. Can be Integrated as single GUI for management of other devices of same OEM like storage, switches etc.
11	Regulatory compliance: FCC/UL/CSA/VCCI/CCC/IEC

D1. Technical Specifications for MDS Nodes – Quantity: 02

S. No	Specification
1	Form Factor/Height: 2U Rack Server or Lesser
2	Processors: Dual processor, with minimum 4 TF per node, processor should be 64-bit latest generation Intel/AMD. For Intel option, each of the CPU sockets should be with a minimum of 18 cores and minimum 2.2 GHz frequency. For AMD option, it should be with a minimum of 32 cores and minimum 1.8 GHz frequency.
3	Memory: 32x DIMM slots, should support 4800MHz/5600 MHz , should be configured with 128 GB DDR5 registered ECC DDR5 DIMMs only.
4	Expansion Slots: Up to 8 x PCIe3.0

5	Drive Bays: Should support up to 8 x SFF hot swap bays with NVME drive support. Should be supplied with 2x 480GB SSD/M.2 Drive (RAID1)
6	HBA/RAID Support: should support RAID 0,1,5,6 or equivalent, should be offered with RAID 1 for OS drives.
7	Security & Availability Features: TPM1.2/2.0; PFA; hot-swap & should support redundant drives, fans, and PSUs, 10-35°C continuous operation; Root of trust hardware or equivalent for security
8	Network Interface: 1 x 100 GBps Non-Blocking Infini Band Port and 2x dedicated 1 GBps port
9	Power: 2x hot swap redundant 80 PLUS Platinum
10	Systems Management: Systems Management inventory, monitor system status and health, alert notification, update system firmware, real time server Systems Management, capture video display content when Operating system is in halt condition. Can be Integrated as single GUI for management of other devices of same OEM like storage, switches etc.
11	Regulatory compliance: FCC/UL/CSA/VCCI/CCC/IEC

D2. Technical Specifications for OSS Nodes – Quantity: 02

S. No	Specification
1	Form Factor/Height: 2U Rack Server or Lesser
2	Processors: Dual processor, with minimum 4 TF per node, processor should be 64-bit latest generation Intel/AMD. For Intel option, each of the CPU sockets should be with a minimum of 18 cores and minimum 2.2 GHz frequency. For AMD option, it should be with a minimum of 32 cores and minimum 1.8 GHz frequency.
3	Memory: 32x DIMM slots, should support 4800MHz/5600 MHz , should be configured with 128 GB DDR5 registered ECC DDR5 DIMMs only.
4	Expansion Slots: Up to 8 x PCIe3.0
5	Drive Bays: Should support up to 8 x SFF hot swap bays with NVME drive support. Should be supplied with 2x 480GB SSD/M.2 Drive (RAID1)
6	HBA/RAID Support: should support RAID 0,1,5,6 or equivalent, should be offered with RAID 1 for OS drives.
7	Security & Availability Features: TPM1.2/2.0; PFA; hot-swap & should support redundant drives, fans, and PSUs, 10-35°C continuous operation; Root of trust hardware or equivalent for security
8	Network Interface: 3 x 100 GBps Non-Blocking Infini Band Port and 2x dedicated 1 GBps port
9	Power: 2x hot swap redundant 80 PLUS Platinum
10	Systems Management: Systems Management inventory, monitor system status and health, alert notification, update system firmware, real time server Systems Management, capture video display content when Operating system is in halt condition. Can be Integrated as single GUI for management of other devices of same OEM like storage, switches etc.
11	Regulatory compliance: FCC/UL/CSA/VCCI/CCC/IEC

E. Interconnect

Primary	100 % non-blocking architecture
1	100 GBPS InfiniBand in 100% non blocking architecture with at least 25% additional ports for future expansion
2	Required no. of ports with cables should be offered with 100% non-blocking architecture.
Secondary	2x 1 G switch with minimum 48 ports or bidder should offer ports as per requirement. Ports should be sufficient for cluster management and local node management.

F. Storage (PFS: 750 TB with 8 GBPS read/write throughput)	
S No	Description
1	The Storage Solution should be based on multiple controllers with Data Assurance. OSS to be configured in active-active mode and MDS to be configured in active-passive mode with no single point-of-failure across the entire solution. Redundancy should be maintained at HBA/HDD/Controller/PSU levels
2	The system should have required cache memory for optimal performance across the two controllers with an ability to protect data on cache if there is a controller failure or power outage. The cache on the storage should have 72 hours or more battery backup or should have destaging capability to either flash/disk.
3	The system must support intermixing of dual ported NVME, SSD, SAS and NL-SAS dual ported drives to meet the capacity and performance requirements of the applications.
4	Should support hardware RAID levels 0, 1, 5, 6 and 10
5	750 TB Usable with Data Protection on NL-SAS or better drives and scalable to 1.5 PB of usable capacity within same storage in similar configuration and disk capacity.
6	<p>The storage should be supplied with rack mount kit. All the necessary connecting cables shall be provided and installed by the vendor.</p> <p>The storage shall have the ability to expand LUNS/Volumes on the storage online and instantly.</p> <p>The proposed storage system should be configured to provide data protection against two simultaneous drive failures.</p> <p>Hot spare drives should be configured as per OEM best practice.</p> <p>Storage system should support RAID level distributing data across multiple Disk to ensure faster rebuild time.</p> <p>System should have redundant hot swappable components like controllers, disks, power supplies, fans etc.</p> <p>System Management software should have capability to monitor performance for IOPs, MB/s, latency and should be able to drill down to the capabilities of monitoring controllers, disk pools, volumes, drives.</p> <p>System GUI manager should be able to manage multiple arrays together. Should support Role-based access control and audit log.</p> <p>Storage should have Platinum rated power supplies.</p> <p>The proposed system should support 99.999% reliability.</p>
7	Storage solution should be offered with Lustre/BeeGFS open-source parallel file system, supported by bidder for 5 years.
8	Storage solution must be offered with minimum 2 x OSS and 2 x MDS servers with configuration as per OEM best practice. Metadata storage should be separate with minimum 2% of total usable capacity on SDD drives. MDS servers should be separate from OSS servers. connectivity between MDS and Metadata storage can be on FC/SAS/IB & OSS & OST should be on IB 100 G.
9	Storage system should be able provide write throughput of 8 GBPS
10	Easy to use GUI based administration interface for configuration, storage management and performance analysis tools. The proposed storage should have features to monitor the health of the system, and automated information delivery for replacement drives when failures occur.
11	The Hardware and software quoted should have 5 years support along with upgrade and updates.
12	The storage should be configured with iSER/IB protocols. System should support SAS, NVMe-FC, NVMe-IB, iSER-IB, SRP-IB, IB protocol & connectivity
13	The proposed storage system should have minimum 8 numbers of 12Gbs or higher backend SAS ports across controllers for disk enclosure connectivity, 4 numbers of 100G IB ports across dual controllers for I/O server's connectivity. Storage should support 32G NVME-FC, 10/25G ISCSI ports.

G. Cluster Management Software Features	
1	The software should handle all the nodes (Master & compute) provided in the solution.
2	An open-source solution should be provided preferably and should be fully supported by server OEM/bidder. If a commercially supported solution is offered, then it must be offered with perpetual licenses and upgrades and update support for atleast 5 years. The commercial software must be compatible with the other software solution provided and has to be fully supported by OEM/bidder.
3	Extensive cluster monitoring capability to drill down to a node-level performance parameters using intuitive and with well-designed graphical reports for all nodes
4	The management software should provide proactive notification of actual or impending component failure alerts.
5	Permission for SSH based access and a robust parallel-execution shell implementation.
6	Denial of access to compute server for other users whose jobs are not currently being executed on those servers using Job Scheduler.
7	The software should run on the Master node.
8	For future scalability it should be ensured that in case, one of the master nodes fails, the cluster management should switch over automatically to the other master node
9	View the status of nodes in the cluster
10	Review generated alerts for pending or on-going problems
11	Deploy, remove, nodes or update the software environment used by nodes
12	Check the content of the repository, add or remove new packages or kits as needed
13	Manage and control NFS mounts and network definitions.
14	Intuitive single point of administration for the entire cluster reduces complexity and improves productivity of administrators
15	Navigate cluster file systems, upload/download files, edit text files, cut/paste.
16	Monitor jobs and workflows tasks, track and visualize key application results.

H. Job scheduler features for HPC	
1	A solution need to be free and open source and fully supported server by the OEM/bidder
2	If a commercially supported scheduler is provided then it must be supported with free upgrades whenever updates are available for the warranty and comprehensive AMC period. The commercial software must be compatible with the other software solution provided.
3	Job scheduler should be compatible to application, with all features.
4	This software should be loaded on the Master node/ Head node in HA.
5	OEM/Bidder should integrate user applications with batch submission script to facilitate seamless usage of the HPC system.
6	At-least 10 concurrent users should be able to submit multiple jobs.
7	Complete cluster integration with comprehensive 5 years onsite support to be provided.
8	Documentation, soft copy of installation, administration and user manual has to be submitted.
9	Bidder/OEM should integrate all user applications for ease of job submission and monitoring.
10	Any jobs submitted without using job scheduler should be killed automatically.

11	Preemptive and backfill scheduling support
12	Application integration support
13	Live reconfiguration capability
14	Support for SLA/equivalent based resource utilization
15	Workload cum resource manager with policy-aware
16	Resource-aware and topology-aware scheduling
17	Advance reservation support
18	Support of job submission through CLI

I. Bidder/OEM Eligibility Criteria	
1	The Principal OEM, bidder and the Source of all items shall be either from India or from the countries who have a cordial relation on cyber security and amicable to India.
2	The OEM or bidder will be responsible for supply, installation, configuration, commissioning, testing, maintenance and support for both hardware and software (supplied by OEM) during the warranty period. A letter of commitment for five years from the date of installation, with respect to Hardware and Firmware support from the OEM or bidder should be enclosed with bid.
3	Bidder and OEM should be financially sound to execute the order i.e., Bidder and OEM should have annual turnover of average of Rs. 2 Crores for two years in the last three audited financial years. The proof must be provided.
4	Bidder should have a direct presence in India from last 5 years.
5	Warranty should be 5 years parts, 5 years labour, 5 years onsite Bidder as well as OEM should submit the warranty letter separately.
6	Supply and Installation should be done within 8 weeks of acceptance of PO.
7	Authorization letter of bidder from OEM to be submitted with bid.
8	Compute OEM should have minimum 2 entries each in November 2023 and June 2024 Top 500 super computer list (Top500.org)
9	Compute OEM should have minimum 2 different entries each in January 2024 and July 2024 entries in Top Super Computers list maintained by CDAC (topsc.cdacb.in).
10	OEM or Bidder should have physical presence in India with registered office and service center for more than 5 years and should have on role support team with 24 x 7 support center in India with toll free number.
11	The Bidder or OEM should have proven at-least 2 HPC cluster installations in Government academic & research institutions such as IITs/IISERs. The PO's alongwith satisfactory installations report(s) should be enclosed in the bid.

J. GENERAL CLAUSES	
1	Only Principal Companies or Authorized partner from Principal companies should quote. Quotations from non - authorized distributors will not be entertained. Compliance mentioned should be referred with public document wherever applicable (except for reports). Benchmark report has to be submitted signed and stamped by authorized signatory.
2	Master, compute, high memory nodes from the same OEM.
3	OEM / Bidder must quote for all the items as per details provided in the technical specifications. Bidder has to quote for all components. Impartial bids will be rejected.
4	Installation, Commissioning & cabling of all supplied hardware equipment and software to be done by OEM/Bidder. Services cannot be downloaded to third party; all services have to be directly provided either by OEM or bidder. OEM/Bidder has to submit undertaking for same.
5	The OEM/bidder should have Service setup in India. OEM/bidder has to offer next business day onsite support for hardware and 4 hours response for software offered by OEM.
6	Bidder has to install and support application listed in tender for 5 years with updates.
7	Bidder has to assist IIT Ropar in Day-to-day admin task like user creation, job script creation, job scheduler trouble shooting, application installation etc.
8	All required libraries, compilers, MPI should be arranged and installed by bidder.
9	Any additional hardware or software required to complete and make the HPC solution functional has to be provided by bidder.
10	The OEM/bidder must certify that the hardware and firmware will be supported for at least 7 years
11	In the tender, either the Indian agent on behalf of the OEM or OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
12	If an agent submits bid on behalf of the OEM, the same agent shall not submit a bid on behalf of another OEM in the same tender for the same item/product.
13	Up to 25% change in the Teraflops on compute nodes and/or storage is possible based on available budget in the final order.
14	Bidders/OEM are welcome to visit the datacenter at IIT Ropar to understand the configuration before submitting the bids. Prior appointment to be taken before the visit.
15	<p>Service Agreement:</p> <p>All provided nodes must be always online and schedulable. Responsibility of support of all items mentioned above is also with the vendor/supplier.</p> <p>(i) The bidder has to ensure that the proposed solution delivers an uptime guarantee of 98% of the entire system on a yearly basis (i.e. annual node-hours of uptime). The downtime for 2% or more on a yearly basis will incur a penalty as an extension of the warranty period for a month per 5% downtime, which the bidder has to compensate by increasing the period of subsequent total months of warranty for the entire system.</p> <p>(ii) 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 servers and the next working day for critical components like internal power supply, networking, and internal storage after the intimation of fault. Any delay in replacement more than 2 days will incur a penalty as extension of warranty period for a month per 10 days of delay, which the bidder has to compensate by increasing the period of subsequent total months of warranty for the entire system.</p>

	(iii) In the event of failure of any of the subsystems or components of the proposed solution, the Bidder has to ensure that the defects are rectified within two full working days. Any delay in node warranty servicing beyond 3 days will incur a penalty as an extension of the warranty period for a month per every 10 days (a fraction would be rounded to the nearest multiple of 10 days), which the bidder has to compensate by increasing the period of subsequent total months of warranty for the entire system.
16	Commercial Bid: In addition to the items mentioned above, the bid must include per unit pricing of each type of nodes, PDUs, and the relevant ancillary hardware, licensing etc. Cost of warranty and support must be included for 5 years for the entire solution. Additional cost for the next 2 years must be mentioned separately (per year). The OEM/Bidder must certify that the hardwares for entire solution will be supported for at least 7 years.
17	Bidders must provide a complete and detailed Schematic Diagram, Networking, Rack layout, Power and total Cooling requirements, Electrical infrastructure requirements, and anything else required at the installation site in IIT Ropar with the technical bid.
18	The entire installation should be done at the proposed site only. Requests for remote access for installation/fine-tuning will not be entertained during the installation period.
19	An undertaking (self-certificate) is to be submitted by the bidder as per enclosed format that the organization has not been blacklisted by any Central/State Government Department/Organization and educational institutes.
20	Canvassing in any form, including communication with institute officials other than what is provided here, would disqualify the bidder from further participation.
21	Work Experience: Bidder should have direct presence in India for more than 5 years. The proof must be provided during the Bid. The bidder is desired to be incorporated and registered in India under the Indian Companies Act 1956 / 2013.

K. Benchmark Tests:

Application Benchmark Table A below describes the workload for seven HPC applications and the corresponding performance numbers for some. The submitted bids must commit to provide application performance better than those mentioned below for the serial nos. 1 to 6 on the supplied system. Serial nos. 6-8 needs to be benchmarked and meet the acceptance criteria.

Application Benchmark Table A:

S. No.	Application Model	Number of Job instances	Required Performance per instance*
1	NAMD v2.14 (default precision) http://www.ks.uiuc.edu/Development/Download/download.cgi?PackageName=NAMD Input data: STMV (40k steps; 1,066,628 atoms) http://www.ks.uiuc.edu/Research/namd/utilities/stmv.tar.gz	1	8 ns/day and 8 minutes of wall-time

2	<p>WRF-ARW v3.8.1 (single precision)</p> <p>Reference: http://www2.mmm.ucar.edu/wrf/users/download/get_sources.html Input data: Single domain, 2.5 km CONUS, June 4, 2005 (6 hrs simulation) http://www2.mmm.ucar.edu/wrf/WG2/benchv3/#_Toc212961289 In namelist.input file:</p> <ol style="list-style-type: none"> 1) Add use_baseparam_fr_nml= .t. in &dynamics 2) Modify run_hours = 6, <p>Instructions to be followed at http://www2.mmm.ucar.edu/WG2bench/conus_2.5_v3/README.txt</p>	2	8 minutes of wall-time
3	<p>The open source codes GROMACS: Inputs Details to be downloaded from http://www.gromacs.org/Downloads Input Data : water-cut1.0_GMX50_bare /3072 PME (nsteps = 50000 steps , 20ps), ftp://ftp.gromacs.org/pub/benchmarks/water_GMX50_bare.tar.gz. The number of processes could be linearly scaled to the number of cores in the entire system. Linearity and performance will be compared against the known available standard results.</p>	-	-
4	<p>High Performance Linpack Benchmark Results also to be submitted with the bid. At least 65% efficiency on single node and at least 60% efficiency on multi node cluster must be achieved.</p>	-	-
5	<p>LAMMPS Benchmark Results also to be submitted with the bid, and matched from the site at the time of acceptance: Reference: https://lammps.sandia.gov/bench.html</p>	-	-
6	<p>Open source IOR/IOZone benchmarks for throughput tests and MDTEST benchmarks for metadata tests running on PFS clients to match the provided storage specifications. Bidders to submit benchmark output and test system configuration in tender response. Same (or better) performance must be demonstrated at the time of acceptance tests using following I/O scenarios:</p> <p>Single PFS client writing to single shared file at 2.5 GB/s (minimum) using multi threaded/multi process benchmark.</p> <p>Multiple PFS clients writing to single shared file at 10 GBps (minimum) for entire storage using multi threaded/multi process benchmark with 1MB block size. Total file size must be double than total storage cache and I/O node memory.</p> <p>Multiple PFS clients writing and reading simultaneously using multi threaded/multi process benchmark with 1MB block size. Each client must be reading/writing different files with total file size greater than 2 times the total storage cache and I/O node memory.</p> <p>Multiple PFS clients (minimum 4) creating 4KB files in single shared directory demonstrating minimum of 10,000 files create/second</p>	-	-

7	VASP licensed codes (old and latest versions) to be installed with test runs from the site https://www.nsc.liu.se/~pla/vasptest/		
8	The bidder has to reproduce benchmark result for a code written by IIT Ropar research group after installation and commissioning of HPC facility. The results produced will be compared with NSM facility.		

* The metric ns/day means how many nanoseconds of simulation per day by wall clock time can be performed. Higher value of ns/day metric represents higher performance. Hence ns/day achieved by bidders should be equal to or higher than given here. For time in minutes, lower value represents higher performance. Hence time achieved by bidders should be equal to or less than given here.

Instructions for Application Benchmark submission

- The benchmark results committed as per the submitted bids must be reproduced after system installation. This will be used as one of the acceptance criteria for successful installation.
- If submitted projected/executed benchmark results are not consistent and found to be inaccurate, resulting into material deviation, it will be treated as major deviation and the bid will be rejected.
- Demonstration of the committed performance based on the above at the time of acceptance test by the purchaser is mandatory and any failure to do so will result in severe penalty.

Modifications to application source codes, input dataset and output files

- No modification is allowed in the source code of the HPC applications and only the above-mentioned versions must be used for reporting benchmarks.
- All input files used by the bidder must be made available. Any modification done by the bidder in the input files must be clearly reported along-with the purpose. The modification to input files must not compromise the accuracy of output.
- All output files must be made available without any tampering.

Code compilation and execution environment settings

- Hyper-threading and Turbo-boost should be off on CPUs for the benchmarking purpose.
- The applications and their dependency libraries must be compiled on the supplied system. All details of applications compilation environment such as compilers (with versions) used, compiler switches used, and environment variables set etc. for the compilation of dependency libraries and HPC applications must be provided.
- All details of applications execution environment such as environment variables set, applications execution commands, number of application processes and threads used, pinning

of processes/threads, parallel I/O at application and system level, file striping etc. must be provided.

Benchmark Results

- All the instances of applications as per Application Benchmark Table A, must be run simultaneously and must be completed in 8 minutes of wall-clock time.
- It is necessary that all the benchmark programs run correctly producing correct results within the required time or with minimum ns/day. Validation of the output of application runs must be made in accordance with the validation steps provided in the Application Benchmark Validation Table B.
- Bidders must provide benchmark results in wall-time, measured by the “time” command, as well as in ns/day for NAMD along-with the configuration of the HPC system used for each run.

Application Benchmark Validation

- Validation of the output of application runs will be made in accordance with the validation steps provided in the Application Benchmark Validation Table B.
- It is expected that some deviations from standard results may exist due to change of compilers, scientific libraries. A tolerance limit of 2% deviation shall be granted to the accuracy of application output. However, this is not deviation DO NOT apply to the execution timings and ns/day number.
- Application execution commands are given for reference purpose only and exact commands may vary. All details of applications execution environment such as environment variables set, applications execution commands, number of application processes and threads used, pinning of processes/threads, parallel I/O at application and system level, file striping etc. must be provided.
- All output files must be made available when asked for.
- System configuration details/specifications of the systems used for benchmarking should be submitted along with execution dates are to be provided. IIT Ropar chooses the right to for seeking additional information on the execution runs submitted as part of the response. Further, the technical committee may request for benchmarks rerun, wherever required (within a period of 7 days from the date of request for rerun), under the supervision of nominated persons.
- Satisfactory completion of benchmarks as specified above is a mandatory requirement.

Application Benchmark Validation Table B:

Sr. No.	Application	Reference execution commands	Output files	Validation steps
1	NAMD	time mpiexec -n <no of processes> namd2 +ppn 10 ./stmv.namd	execution log, *.xsc, *.vel, *.coor	ENERGY values at step no. 40000 should match Total Energy: -2459527.0041 Kinetic Energy: 944509.1447 Potential Energy: -3404036.1488
2	WRF-ARW	time mpiexec -n <no of processes> wrf.exe	execution log, all_rsl.*, wrfout *. wrfrst *	<u>Please send output of following:</u> <u><wrfsource>/external/io_netcdf/diffwrf<Ref wrfout *> wrfout_d01_2005-06-04_12_00_00</u> <u>* The ref wrfout file will be provided upon request</u> <u>The last line of rsl.error.0000 file should have "wrf: SUCCESS COMPLETE WRF"</u>

Post-installation benchmarking for stability testing of the system

The bidder must compile and execute these benchmarks on the installed cluster. The HPC applications with listed datasets must be executed for their respective number of job instances as mentioned in *Application Benchmark Table A*. All the jobs must meet the required performance as per *Application Benchmark Table A* and *Application Benchmark Validation Table B*. The bidders may be asked to demonstrate the compilation of the application source codes as well as dependency libraries. After complete installation of the proposed system, the application benchmarks given in *Application Benchmark Table A* must be completed and verified on the installed system as per the above directions and the performance numbers committed in the submitted bids. Subsequently, for stability testing of the installed HPC system, multiple sets of the same application benchmarks are to be completed by the bidder for duration of 24 hours. Every instance of these tests must meet the minimum threshold performance and accuracy of results. Multiple sets of benchmarks as per Table A must be run for 24 Hours duration after installation using the queuing system to check the stability of HPC system. For this test, following conditions must be met.

- Output data must be valid for all the instances.
- Every node must run some benchmark for the entire duration of the stability test. If any set(s) of timings are higher than the threshold values in the Table A, the jobs must be re-run on the same set of nodes and all the anomalies must be resolved.

SUPPORT REQUIREMENTS TO BE PROVIDED BY THE SUPPLIER**Resident Engineer at IIT Ropar:**

The bidder must provide onsite resident engineer during the warranty period with a minimum qualification of BE in computer science / IT streams, with a prior experience of at least 3 years in the domain of data centre computing facilities. The persons must be well verse with linux

operations/commands and capable to take care of the HPC Data Centre Services Infrastructure facility. In case of trouble shooting, if the resident engineers are not able to address the issue, it is the responsibility of the bidder to arrange personnel to resolve the problem as soon as possible. Any cost related to the resident engineer must not be borne by the Bidder/OEM. However, acceptance of the personnel will be at discretion of IIT Ropar.

Hands On Training by Certified Professionals: Bidder/OEM must provide hands on training by certified professionals who are certified on Linux, and HPC Architecture for 4 week days in continuation at IIT Ropar. Any cost related to hands on training component must be borne by bidder/OEM and must be covered in the solution proposed.

SCOPE OF WORK:

- Bidder should provide the layout design of the racks along with the power distribution and network (IB & Ethernet) diagrams. The design should clearly show the positioning of servers and various other hardwares inside the rack.
- Installation and commissioning of HPC Cluster and Storage including Racking, stacking, and cabling of the supplied hardware
- Acceptance criteria:
 - a. Running of HPL to achieve the minimum 60TF sustained performance (CPU), STREAM benchmark. Any other compute-intensive load for 24 hr on the entire cluster for verifying the reliability
 - b. Bidder must commit (while submission) and demonstrate (after installation) the application performance mentioned in Benchmark tests.
 - c. Installation of commonly used libraries – For example, GNU, Intel OneAPI compilers, etc to be installed
- Bidder should provide the total cooling and Power rating of the quoted hardware.
- Maximum power load supported is 10 kWh per rack in the IIT Ropar data center. Maximum total power for HPC is 40 kWh. Bidder should provide the layout design of the racks along with the power distribution figures including the total power required in the submitted bid.
- Documentation and Manuals of all systems to be supplied.

L. Bill of Materials (Financial Bid):

Price bid should be uploaded in given BOQ_XXXX.xls format only in online mode and not in technical bid, failing which your bid shall stand rejected. However, the price bid is as follow for your reference:

60TF HPC System (Rmax)+ PFS Storage Sub-system with interconnect.

S. No.	Description	Qty	Unit	Currency	Unit Price	Customs ms Duty /GST %	Amount
1.01	Nodes						
1.02	Master Nodes	2	Nos				
1.03	CPU only Compute Nodes – Required number of CPU-only nodes to achieve 60TF(Rmax) sustained performance (to be calculated and mentioned by bidder based on the criteria and specifications given in the tender). Quantity as required.	1	Set				
1.04	High Memory CPU only Compute Nodes	2	Nos				
1.05	MDS Nodes	2	Nos				
1.06	OSS Nodes	2	Nos				
1.07	Monitor, KB & Mouse - 17" console - 2U or better	1	Set				
1.08	HPC Communication Network						
1.09	Primary Communication Network	1	Set				
1.1	Secondary Communication Network	1	Set				
1.11	IPMI Communication Network	1	Set				
1.12	PFS based 750 TB Usable capacity Storage system	1	Set				
1.13	Software:						
1.14	OS	1	Set				
1.15	Any other components/items required to complete the total HPC Cluster & Storage as a System	1	Set				
1.16	Other Charges like customs clearance, installation, etc. (if any)	1	Lot				

Prices: on F.O.R. Site / D.D.P. Site basis. *(To be filled separately in BOQ only)*

<u>Additional T&C</u>		
1. Schedule of Tender and EMD :		
1.	Last Date and Time for Uploading of Bids	11.12.2024 up to 03:00 PM
2.	Date and Time of Opening of Technical Bids	11.12.2024 up to 03:30 PM
3.	Earnest Money Deposit (EMD)	Rs. 8,00,000/-
A complete set of tender documents may be Download by prospective bidder free of cost from the website http://eprocure.gov.in/eprocure/app .		
2. EMD:		
EMD to be paid through RTGS/NEFT/BG into IIT Ropar Revenue Account Bank details are as mentioned in the schedule. 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. In case of successful Tenderer, it will be retained till the successful and complete installation of the equipment.		
3. Preparation of Bids:		
(a) Technical bid consisting of all technical details alongwith commercial terms and conditions and EMD; and		
(b) Financial bid indicating item-wise price for the items mentioned in the technical bid.		
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 BoQ_XXXX. The Technical bid and the financial bid should be submitted Online at CPPP.		
4. Submission of tender:		
The tender has to be submitted on-line before the due date along with the required annexure(s). The offers received after the due date and time will not be considered. No manual bids will be considered.		
5. Bidding:		
A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if: a) they have controlling partner (s) in common; or b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or c) they have the same legal representative/agent for purposes of this bid; or d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid. f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid.		

6. Opening of Bids:

Online received bids (complete in all respect) will be opened by the duly constituted Committee in presence of bidders / representative (if available) as mentioned in the "Schedule". Only one representative will be allowed to participate in the tender opening. Bid received without declaration 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.

7. Price Bid:

Price bid should be submitted in given BOQ_XXXX.xls format online. The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. Further, depending on the nature of the goods, there may be cost elements towards installation and commissioning; operator's training, and so on. The percentage of taxes & duties shall be clearly indicated.

For ranking of offers, price of complete scope of supply as detailed in technical specifications, the procuring authority/Purchaser may decide as follows for comparison of price bid –

- (i) All items of the bid which are mandatorily required to meet the tendered specifications of the item/system
- (ii) If a bidder has put certain items/modules which are required to meet the tendered specifications in the 'optional' part of the bid, then such optional items shall also be included for the purpose of price comparison.
- (iii) On the other hand, if a bidder has inadvertently included any item/module in its main price bid which is not required as per tender specifications, then the price of such item/module shall be excluded from the price comparison provided that the price for the said item/module is clearly reflected separately in the bid.
- (iv) Anything asked as 'optional' in our specs is not to be included for overall comparison

Non-conformities between Figures and words: Sometimes, non-conformities/errors are also observed in responsive tenders between the quoted prices in figures and in words. This situation normally does not arise in case of e-Procurement. This should be taken care of in the manner indicated below:

- (i) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected.
- (ii) If there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected;
- (iii) If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

8. Taxes:

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the buyer. However, GST etc, in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the Purchase Order.

9. Rates Comparison:

Bidders are requested to send their rates on FOR, IIT Ropar basis in case of indigenous items.

10. Payment Terms:
a). Indigenous goods: 90% payment will be made within 30 days from the date of receipt of material, inspection and installation at IIT Ropar. Balance 10% with verification and approval by the designated authority on installation report and submission of performance bank guarantee equivalent to 5% of order value valid for warranty period + 3 months.
b). Imported goods: Letter of credit– 60% payment will be made through LC and Balance 40% within 30 days from the date of receipt of material, inspection and installation at IIT Ropar with verification and approval by the designated authority on installation report and submission of performance bank guarantee equivalent to 5% of order value valid for warranty period + 3 months. Bank charges occurred outside India will be borne by the beneficiary.
11. Acceptance of Terms & Conditions:
Bidders must confirm the acceptance of all the terms and conditions of this NIQ. Any non-acceptance or deviations from the terms and conditions must be clearly mentioned. However, tenderers must note carefully that any conditional offer or any deviation from the terms and conditions of this NIQ may render the quotation liable for rejection.
12. Guarantee / Warranty:
Duly signed and stamped certificate of at least 5 years comprehensive onsite warranty as per Annexure-I should be attached with the technical bid. Successful firm will be required to agree for payment of penalty for exceeding permissible downtime during Guarantee / Warranty period.
13. Country of origin:
Country of origin of the quoted item should be mentioned in the offer in case of imported item.
As per Ministry of Finance, Deptt. of Expenditure, Public Procurement Division Order (Public Procurement No.1) issued from file No.6/18/2019-PPD dated 23rd July, 2020 regarding Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs) 2017, it is directed that any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority i.e. the Deptt. for Promotion of Industry and Internal Trade (DPIIT). The said order will not apply to bidders from those countries (even sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects (updated lists of the countries are given in the Ministry of External Affairs)
“Bidder” (including the term ‘tenderer’, ‘consultant’ or ‘service provider’ in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participated in a procurement process. “Bidders from a country which shares a land border with India” for the purpose of this Order means:
<ul style="list-style-type: none"> i. An entity incorporated, established or registered in such a country; or ii. A subsidiary of an entity incorporated, established or registered in such a country; or iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or iv. An entity whose beneficial owner is situated in such a country; or v. An Indian (or other) agent of such an entity; or vi. A natural person who is the citizen of such a country; or vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above. <p>The beneficial owner for the purpose of above will be as under: -</p>

<p>1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person (s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercise control through other means.</p>
<p>Explanation:</p> <p>a. “Controlling ownership interest” means ownership of or entitlement to more than twenty-five per cent of share or capital or profit of the company;</p> <p>b. “Control” shall include the right to appoint majority of the directors or to control the management of policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;</p> <p>2. In case of a partnership firm, the beneficial owner is the natural person (s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;</p> <p>3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person (s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;</p> <p>4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;</p> <p>5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership. An agent is a person employed to do any act for another, or to represent another in dealings with the third person.</p>
<p>14. Service Facility:</p> <p>Bidder should mention about the service set up in India and how capable they are to provide after sales services.</p>
<p>15. Training:</p> <p>If required, should be included in your offer without any extra cost.</p>
<p>16. Banker’s details:</p> <p>Name and address of the banker of your company should be mentioned.</p>
<p>17. Reference of supply:</p> <p>Name and contact details of the premier educational Institutes where the quoted equipment has been installed in India should be attached as per Annexure-C. Copies of at least two purchase orders may be attached(If possible). IIT Ropar reserves the right to inspect the equipment for its actual performance in any of the listed Institute.</p>
<p>18. Rates Comparison:</p> <p>Bidders are requested to send their rates on FOR, IIT Ropar basis in case of indigenous items and on FOB/FCA basis in case of imported items with separately mentioning CIF/CIP charges. Rates comparison will be made on Net Price (Including Freight/ Insurance/Installation/Taxes/Duties etc.) if offers are received both for indigenous and import items. If offers are received only for import items then comparison will be made on FOB/FCA basis. Rates of foreign currency will be taken from RBI website as on the opening of the technical bids for the purpose of conversion in Indian rupees.</p>
<p>19. Arbitration</p> <p>19.1 In the event of failure to carry out the contractual obligations, within the stipulated period or extended period and determination of the contract for any reason, violation of warranties etc. the IIT Ropar shall have the right to carry out the unfinished obligation at the exclusive cost and risk of the bidder/firm, after due notice and the difference so accrued shall be recoverable from the bidder/firm.</p>

19.2	The provision of the Arbitration and Conciliation Act, 1996 or as at the relevant time and of rules framed there under and any statutory modifications thereof shall be deemed to apply and be incorporated in this agreement.
19.3	Upon every or any such reference, the cost of any incidentals to the reference and award(s) respectively shall be at the reasonable discretion of the Arbitrators or in the event of their not agreeing, of the Umpire appointed by them who may determine the amount thereof or direct the same to be fixed as between solicitors and client or as between parties and shall direct by whom and in what manner the same shall be borne and paid.
19.4	Panel of arbitrators will be provided by IIT Ropar out of which the bidder will have to select one.
19.5	The bidder shall have no objection if the officer who has dealt with the case at any stage is nominated as an arbitrator. Further, that one of the arbitrator's shall be Accounts Expert.
19.6	In case of vacancy being caused due to resignation, death or incapacity of the arbitrator(s) to function as such, the same shall be provided in the aforesaid manner and the new arbitrator(s) shall proceed from the stage at which vacancy is caused.
20. Jurisdiction:	
	The Courts of Ropar alone will have the jurisdiction to try any matter, dispute or difference between the parties arising out of this tender/contract. It is specifically agreed that no Court outside and other than Ropar court shall have jurisdiction in the matter.
21. Force Majuere:	
	Any failure of omission or commission to carry out the provision of this contract by the supplier shall not give rise to any claim by one party, one against the other, if such failure of omission or commission arises from an act of God; which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane, or nay pestilence or from civil strikes, compliance with any statute and/or regulations of the Government, lockouts and strikes, riots, embargoes or from any political or other reason beyond the supplier's control including war (whether declared or not) civil war or stage of insurrection, provided that notice of the occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to Force Majuere conditions.
22. Risk & Cost	
	In the event of failure to carry out the contractual obligations, within the stipulated period or extended period and determination of the contract for any reason, violation of warranties etc. the IIT Ropar shall have the right to carry out the unfinished obligation at the exclusive cost and risk of the bidder/firm, after due notice and the difference so accrued shall be recoverable from the bidder/firm.
23.	The material found defective upon opening by the supplier representative in presence of Central stores personnel/indenter of IIT Ropar or not as per tendered specifications will be lifted back at the cost and risk of the supplier. The material lying in the IIT Ropar premises would be at supplier's risk and cost.
24. Liquidated Damages:	
	In case the firm fails to execute the supply as per the purchase order in whole or in part as per the terms and conditions of PO, IIT Ropar can impose the penalty @1% per week of the undelivered stores, subject to a maximum of 10%. It will also be open to the institute to procure the required item(s) from any other source at the risk and expense of the firm.
Note:	The Director, IIT Ropar reserves the right to accept/reject any or all tenders without assigning any reasons thereof and also to reject the material if the same is not found conforming to the specifications, with further right to affect risk and cost of the purchases.

INTEGRITY PACT

To,

.....
.....
.....

Subject: Tender No. for the

Dear Sir,

It is hereby declared that Indian Institute of Technology Ropar is committed to follow the principle of transparency, equity and competitiveness in public procurement. The subject Tender is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected. This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the Indian Institute of Technology Ropar.

Yours faithfully,

(Duly authorized signatory of the Bidder)

INTEGRITY PACT

To,
The Registrar
Indian Institute of Technology Ropar
Rupnagar.

Subject: Submission of Tender for the _____.

Dear Sir,

I/We acknowledge that Indian Institute of Technology Ropar is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document. I/We agree that the Tender is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the Tender. I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by Indian Institute of Technology Ropar. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement. I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, Indian Institute of Technology Ropar shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/ bid.

Yours faithfully,

(Duly authorized signatory of the Bidder)

INTEGRITY PACT

This **INTEGRITY PACT** is made and executed at.....on this day of.....20.....

BY AND BETWEEN

IIT ROPAR represented through its Registrar, (Hereinafter referred to as "**Principal/Owner**" which terms or expression shall, unless excluded by or repugnant to the meaning or context hereof include its successors and permitted assignees)

AND

M/s..... a company incorporated under the Companies Act..... through its representative/authorized signatory (insert name and designation of the officer) vide resolution dated passed by the Board of Directors, having its office at... (hereinafter referred to as "**The Bidder/Contractor**" which term or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the **Second Part**.

Preamble

The Principal intends to award, under laid down organizational procedures, contracts for..... The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1-Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - c. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2-Commitments of the Bidder(s)/ Contractor(s)

- (1) The Bidder(s)/Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.
 - a. The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b. The Bidders(s) Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-

submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

- c. The Bidder(s) Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidders(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information tained or transmitted electronically.
 - d. The Bidder(s)/ Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractors(s) of Indian. Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (page no. 6)
 - e. The Bidder(s)/ Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
 - f. Bidder(s) /Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter. The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (2) The bidder(s)/Contractor(s) will not instigate third person to commit offences outlined above or be an accessory to such offences.

Section 3-Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is placed at (page nos. 7-13).

Section 4-Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5-Previous transgression

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6 - Equal treatment of all Bidders / Contractors/Subcontractors

- (1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate this provisions.

Section 7-Criminal charges against violating Bidder(s)/Contractor(s)/Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8- Independent External Monitor

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subje to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him/her to treat the information and documents of the Bidders/Contractors as confidential. He/she reports to Secretary, MoE.
- (3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
- (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) Contractor(s) Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-Disclosure of Confidential Information' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Secretary, D/o Higher Education.
- (5) The Principal will provide to the Monitor sufficient information about all meeting among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (7) The Monitor will submit a written report to the Secretary, D/o Higher Education within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- (8) If the Monitor has reported to the Secretary, D/o Higher Education, a substantiated suspicion of an offence under relevant IPC / F Act and the Secretary, MoE has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (9) The word '**Monitor**' would include both singular and plural.

Section 9-Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealing.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Secretary, D/o Higher Education.

Section 10 - Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Office of the Principal, i.e. New Delhi.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMS.
- (6) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.
- (7) The actions stipulated in this Integrity Pact are without prejudice to any other legal action(s) that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

IN WITNESS WHEREOF, the parties hereunto set their hands and seals and executed this **INTEGRITY PACT** as of the day/month/year first above written:

For and on behalf of

THE REGISTRAR, IIT ROPAR (First Party)

SIGNED, SEALED AND DELIVERED by

Name:.....

Designation:.....

Address:

Authorized Signatory

For and on behalf of

M/s.....**(Second party)**

SIGNED, SEALED AND DELIVERED by

Name_____

Designation:.....

Address:.....

Representative/authorized signatory

Vide resolution dated passed by the Board of Directors

In the presence of Witness:

1.

2.

ANNEXURE- B

FORMAT FOR NON BLACKLISTING OF SUPPLIER

I/ We _____Manufacturer/partner/Authorized Distributor/Agent (strike out which is not applicable) of (Supplier) _____do hereby declare and solemnly affirm that the individual/firm/company is not black-listed by the Union/State Government/Autonomous body.

Deponent
Address _____

I/ We hereby solemnly declare and affirm that the above declaration is true and correct to the best of my knowledge and belief. No part of it is false and nothing has been concealed.

Deponent
Dated: _____

(Note: To be furnished on non-judicial stamp paper duly attested by the Oath Commissioner.)

ANNEXURE- C

PROFORMA FOR USER/CLIENT LIST

[illegible]

ANNEXURE -D

ON THE COMPANY/FIRM LETTER HEAD

To,
The Registrar,
Indian Institute of Technology Ropar,
Punjab-140001

SUBJECT: Submission of RTGS/NEFT details

Sir,

As per your instructions, the detail of RTGS/NEFT in respect of M/s _____ is as follows:

BENEFICIARY NAME :-	
BANK NAME:-	
BRANCH NAME:-	
BRANCH CODE:-	
BANK ADDRESS:-	
TYPE OF A/C.:-	
BANK A/C.NO.:-	
IFS CODE:-	
MICR NO:-	
PAN OF BENEFICIARY:-	
SERVICE TAX NO.:-	
TIN NO.:-	
NAME OF CONTACT PERSON:-	
TELEPHONE/MOBILE NO.:-	
EMAIL ID:-	

Certified that above mentioned details are true and correct.

For M/s _____

(Authorised signatory)

FOR BANK USE ONLY

Verified the above mentioned detail and signature as per the records maintained by _____
(bank name).

Signature (with bank seal)

Code _____

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 Ropar

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.		NAME & ADDRESS OF THE Vendor/ Manufacturer / Agent
1	Phone	
2	Fax	
3	E-mail	
4	Contact Person Name	
5	Mobile Number	
6	GST Number	
7	PAN Number	

(Signature of the Tenderer)

Name: _____

Seal of the Company

<On Organization Letter Head>

ANNEXURE-F
(For Goods/ Services Contracts)

<CERTIFICATE>

Tender No. :-

Date:-

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that this bidder is not from such a country.

OR (whichever is applicable)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that this bidder is from _____(Name of Country) and has been registered with the Competent Authority. I also certify that this bidder fulfills all the requirements in this regard and is eligible to be considered.

(Copy/ evidence of valid registration by the Competent Authority is to be attached)

Signature of Bidder/ Agent

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

ANNEXURE-G

<TO BE PROVIDED BY OEM ON LETTERHEAD>

DECLARATION OF COUNTRY OF ORIGIN

(To be given on Company Letter Head – For tender value below Rs.10 Crores)

(To be given by Statutory Auditor/ Cost Auditor/ Cost Accountant/ CA for tender value above Rs.10 Crores)

**To,
The Registrar,
Indian Institute of Technology Ropar,
Rupnagar, Punjab - 140001**

Subject: - Declaration of Country of Origin

Tender Reference No:

Name of Tender/ Work:

1. Country of Origin of Goods being offered: _____ (OM No. 6/18/2019-PPD dated 23.07.2020)

“*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.”

Yours faithfully,

(Signature of the bidder, with Official Seal)

Annexure-H**FORMAT FOR MANUFACTURER'S AUTHORISATION CERTIFICATE**

To,

The Registrar

Indian Institute of Technology Ropar

Nangal Road, Rupnagar-140001

Subject: Tender for “_____”.

Dear Sir,

We manufacture of original equipment at (.....address of factory.....) do hereby authorize M/s (Name and address of Agent) to submit a bid, negotiate and receive the order format against your tender enquiry.

M/s. is authorized to bid and conclude the contract in regard to this business.

We hereby extend our full guarantee and warranty as per clause conditions NIQ for the goods and services offered by the above firm.

Yours faithfully,

[Name & Signature]

For and on behalf of M/s. _____ [Name of manufacturer]

Note:

1. Items of indigenous nature or quoted in INR, more than 1 authorized representative may participate in the same tender and submit their bids on behalf of their OEM/Principal/Manufacturer if the OEM permits more than one authorized bidder in such case as per their policy.

2. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer

3. The letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. The same should be included by the bidder in its techno-commercial unpriced bid.

CERTIFICATE OF WARRANTY

i). I/We certify that the warranty shall be for a period of (as mentioned in the tender) comprehensive warranty starting from the date of satisfactory installation, commissioning and handing over of the equipment and of the works conducted therewith covered under the supply order in working order. During the warranty period, I/we shall provide free “after sale service” and the replacement of any part(s) of the equipment or rectification of defects of work of the equipment will be free of cost. The replacement of the parts shall be arranged by us, at our own cost and responsibility. We undertake that the above warranty shall begin only from the date of satisfactory and faultless functioning of the equipment for 60 days at IIT Ropar premises. The benefit of change in dates of the warranty period shall be in the interest of the use/your organization.

ii). During the warranty period, we shall provide at least 5 or more preventive maintenance visits.

iii). Uptime Guarantee: We ensure that the proposed solution delivers an uptime guarantee of 98% of the entire system on a yearly basis (i.e. annual node-hours of uptime). The downtime for 2% or more on a yearly basis will be eligible to incur a penalty as an extension of the warranty period for a month per 5% downtime, which we will compensate by increasing the period of subsequent total months of warranty for the entire system.

a). All complaints will be attended by us within with one working day of receipt of the complaint in our office.

b). The defects, if any, during the guarantee/warranty period will to be rectified free of charge by arranging free replacement wherever necessary. It will be completed within 2 working days for individual servers and the next working day for critical components like internal power supply, networking, and internal storage after the intimation of fault. Any delay in replacement more than 2 days will incur a penalty as extension of warranty period for a month per 10 days of delay, which the bidder has to compensate by increasing the period of subsequent total months of warranty for the entire system.

c). Penalty: We shall pay a penalty equivalent to 0.1 % of the FOB value of the equipment for every week or part thereof delay in rectifying the defect.

d) In the event of failure of any of the subsystems or components of the proposed solution, the Bidder has to ensure that the defects are rectified within two full working days. Any delay in node warranty servicing beyond 3 days will incur a penalty as an extension of the warranty period for a month per every 10 days (a fraction would be rounded to the nearest multiple of 10 days), which the bidder has to compensate by increasing the period of subsequent total months of warranty for the entire system.

Note: The right to accept the reason (s) for delay and consider reduction or waive off the penalty for the same shall be at the sole discretion of the Director, IIT Ropar

iv. We certify that the equipment being/quoted is the latest model and that spares for the equipment will be available for a period of at least 07 years and we also guarantee that we will keep the organization informed of any update of the equipment over a period of 07 years.

v. We guarantee that if we fail to carry out the maintenance within the stipulated period, IIT Ropar reserves the right to get the maintenance work carried out at our risk, cost and responsibility after informing us. All the expenses including excess payment for repairs/maintenance shall be adjusted against the Performance Bank Guarantee. In case the expenses exceed the amount of Performance Bank Guarantee, the same shall be recoverable from us with/without interest in accordance with the circumstances.

vi. We shall try to repair the equipment at IIT Ropar premises itself. However, the equipment will be taken to our site on our own expenses in case it is not possible to repair the same at IIT Ropar. We shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till the equipment is rehabilitated to the IIT Ropar after repair Any loss of equipment or its accessories under its charge on account of theft, fire or any other reasons shall be at our sole risk and responsibility which will be compensated to IIT Ropar for such losses at the FOB/CIF value for the damaged/lost equipment/part, including accessories.

vii. We undertake to perform calibration after every major repair/breakdown/taking the equipment for repair out of IIT Ropar premises.

viii. In case of extended warrantee, we undertake to carry out annual calibration of the equipment.

ix. We guarantee that we will supply spare parts if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price.

x. We guarantee to the effect that before going out of production of spare parts, we will give adequate advance notice to you so that you may undertake to procure the balance of the life time requirements of spare parts.

xi. We guarantee the entire unit against defects of manufacture, workmanship and poor quality of components.