

NOTICE INVITING TENDER (E-Procurement mode)

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

(An Autonomous Institution, Ministry of Human Resource Development, Govt. of India)

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Website: www.iiserpune.ac.in

Open Tender Ref. No: IISER/PUR/0666/2019

Date: 20/11/2019

Indian Institute of Science Education and Research, Pune invites online bids (e-tender) in two bids systems, from OEM/Authorized distributors/Authorized dealer for the following.

Brief Details of Tender:

Item Description	Estimate Cost of Tender (Rs).	EMD (Rs).	Tender Fee (inclusive of all taxes) (Rs.)
Setting up of Transmission Electron Microscopy facility at IISER Pune	26,00,00,000/-	52,00,000/-	1180/- Inclusive of GST @ 18%

The Tender Document can be downloaded from Central Public Procurement (CPP) Portal <https://eprocure.gov.in/eprocure/app> or Institute website www.iiserpune.ac.in and bid is to be submitted **online only** through the E-procurement portal up to the last date and time of submission of tender.

Critical Dates of Tender

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	20/11/2019	18:00 Hrs.
2	Pre-Bid Meeting	27/11/2019	15:00 Hrs.
3	Bid Submission Start Date	04/12/2019	18:00 Hrs.
4	Bid Submission Close Date	18/12/2019	15:00 Hrs.
5	Closing date & time for Submission of original EMD & Tender Fee	18/12/2019	15:00 Hrs.
6	Opening of Technical Bids	20/12/2019	15:00 Hrs.

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

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 0120-4200462, 0120-4001002, 91-8826246593.

Index Page

Sr. No	Description of Contents	Page No
1	INSTRUCTIONS FOR ONLINE BID SUBMISSION	3-4
2	CHAPTER-1 INVITATION FOR TENDER OFFERS	5-10
3	CHAPTER-2 INSTRUCTIONS TO BIDDERS	11-13
4	CHAPTER - 3 CONDITIONS OF CONTRACT	14-19
5	CHAPTER 4- SCHEDULE OF REQUIREMENTS, SPECIFICATIONS & ALLIED TECHNICAL DETAILS	20-30
6	QUALIFICATION REQUIREMENTS	31-32
7	CHAPTER-5 PRICE SCHEDULE	33-35
8	ANNEXURE – A - FORMAT/QUESTIONNAIRE FOR COMPLIANCE OF TERMS AND CONDITIONS	36-40
9	ANNEXURE – B - FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS	41
10	ANNEXURE – C - BID SECURITY FORM	42
11	ANNEXURE – D - MANUFACTURER’S AUTHORIZATION FORM	43
12	ANNEXURE – E – PREVIOUS SUPPLY ORDER LIST FORMAT	44
13	ANNEXURE – F - BIDDER INFORMATION FORM	45
14	ANNEXURE – G - BLACKLIST CERTIFICATE	46
15	ANNEXURE – H – ANNUAL MAINTENANCE CONTRACT	47
16	ANNEXURE – I PRE CONTRACT INTEGRITY PACT	48-53
17	IMPORTANT NOTICE	54
18	CHECKLIST FOR BIDDERS	55

Instructions for Online Bid Submission:

This tender document has been published on the Central Public Procurement Portal ([URL:https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)) & Institute website www.iiserpune.ac.in . 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.

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

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

REGISTRATION

1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
7. The CPP Portal also has user manual with detailed guidelines on enrollment and participation in the online bidding process. Any queries related to process of online bids or queries related to CPP Portal may be directed to the 24x7 CPP Portal Helpdesk.
8. The Institute will not be responsible for any type of technical issue regarding uploading of Tender on website.

SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS formats. Bid documents may be scanned with 100 dpi with black and white option.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Financial Bids can be submitted in PDF format (As per Chapter 5).
The bidder may add rows to include the prices of all components & warranties, installation etc. whichever applicable.
4. 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.
5. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
6. 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.
7. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

- i. 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.
- ii. 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 **0120-4200462, 0120-4001002, 91-8826246593**.

CHAPTER 1
INVITATION FOR Tender Offers

**Indian Institute of Science Education and Research (IISER), Pune invites e-Tender for
IISER/PUR/0666/19 – TRANSMISSION ELECTRON MICROSCOPES.**

1. The BIDDERS are requested to give detailed tender in two Bids i.e.
 - a. **Part - I: Technical Bid.**
 - b. **Part - II: Commercial Bid.**

2. A Pre-bid conference will be held at IISER Pune, Purchase Section, Dr. Homi Bhaba Road, Pashan, Pune – 411008 on. 27-11-19 from 03:00 PM to 04:00 PM (IST). All prospective bidders are requested to kindly submit their queries to the address indicated above or email at purchase@iiserpune.ac.in so as to reach latest by 26/11/2019. During Pre-bid meeting the answers / clarifications to the queries will be made available and also uploaded on our website. No queries will be entertained after the Pre-bid meeting.

TIME SCHEDULE

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	20/11/2019	18:00 Hrs.
2	Pre-Bid Meeting	27/11/2019	15:00 Hrs.
3	Bid Submission Start Date	04/12/2019	18:00 Hrs.
4	Bid Submission Close Date	18/12/2019	15:00 Hrs.
5	Closing date & time for Submission of original EMD & Tender Fee	18/12/2019	15:00 Hrs.
6	Opening of Technical Bids	20/12/2019	15:00 Hrs.

Supply means: “Supply, Installation, Commissioning and satisfactory demonstration of the whole system and training”. If any charges extra are payable for Installation, Commissioning and training, the same should be specified in the commercial offer.

3. AVAILABILITY OF TENDER:

The tender document can be downloaded from <http://eprocure.gov.in/eprocure/app> and be submitted only through the same website.

Technical Bid:

1. The online envelope clearly marked as “**Technical Bid - Envelope No. 1**” shall contain the all scanned copies of originals documents in PDF Format.
 - a) Compliance statement/questionnaire of tender terms and conditions as per **Annexure-‘A’**.
 - b) Compliance statement of specifications as per **Annexure- ‘B’**.
 - c) Bid Security/EMD as per **Annexure- ‘C’**.
 - d) Manufacturer authorization as per **Annexure –‘D’**.
 - e) Previous Supply Order List Format as per **Annexure –‘E’**.
 - f) Bidder Information Form as per **Annexure –‘F’**.
 - g) Blacklist Certificate as per **Annexure –‘G’**.
 - h) Annual Maintenance Certificate as per **Annexure –‘H’**.

- i) Pre Contract Integrity Pact **Annexure –‘I’**
- j) Solvency certificates (not older than twelve months) issued by Scheduled/Nationalized bank with which BIDDER holds the current account.
- k) Copy of GST/ PAN No. and TIN No. allotted by the concerned authorities. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration and a copy of NISC/MSME registration wherever it is applicable should also be provided in Technical Bid.
- l) Technical literature/ leaflets and complete specifications of quoted model(s) along with commercial terms and conditions.
- m) Undertaking that the successful BIDDER agrees to give a security deposit amounting to 10% of the purchase order value by way of Demand Draft in favor of The Director, IISER Pune.
- n) In case of exemption from submission of Bid security, proof of registration with NSIC/MSME
- o) Details of supplies of similar equipments.
- p) Scanned copy of Tender Fee & EMD and it is required to submit the same in original in a sealed envelope at the following address

Assistant Registrar (Stores & Purchase)

Indian Institute of Science Education and Research (IISER), Pune

Dr. Homi Bhabha Road, Pashan, Pune– 411008.

Tel: +91-020-25898017; Email: purchase@iiserpune.ac.in

Website: www.iiserpune.ac.in

TENDER FEE & EARNEST MONEY DEPOSIT DETAILS

- a) **Tender Fee of Rs. 1180/- (In One Thousand One Hundred Eighty Only)** in the form of Demand Draft from Nationalized/scheduled bank in favor of The Director, IISER Pune. The firm registered with NSIC/MSME as manufacturer for the supply of the same category of item for which the party is submitting quotation will be exempted from submission of FEE.
- b) **EMD of Rs. 52,00,000/- (In Fifty Two Lakhs Only)** in the form of Bank guarantee (As per format enclosed as ANNEXURE- ‘C’) or Demand Draft of a scheduled bank in the name of Director, IISER, Pune valid for 180 days from the date of opening of the tender.

Exemption from submission of EMD (Only for Indigenous Purchases in INR Only):

Bidders registered with any of the following agencies/ bodies as per Public procurement policy for Micro & Small Enterprises (MSE) order 2012 are exempted categories from payment of EMD provided that the registration certificate issued by any one of these below mentioned agencies must be valid as on close date of tender.

Micro small or medium enterprises who have applied for registration or renewal of registration with any of these agencies/bodies but have not obtained the valid certificate as on close date of tender are not eligible for exemption.

- 1) Khadi and Village Industries Commission (KVIC)
 - 2) National Small Industries Corporation (NSIC)
 - 3) Any other body specified by Ministry of MSME/GOI. To avail exemption it is mandatory to upload valid
- c) The firm registered with NSIC/MSME as manufacturer for the supply of the same category of item for which the party is submitting quotation will be exempted from submission of EMD. Intended parties will have to give proof of registration along with their quotation. EMD of the

unsuccessful bidders shall be refunded without any interest at the earliest after finalization of the purchase of concerned item.

- i. The BIDDER who submits the tender on behalf of their principals should produce documentary evidence in support of their authority to quote or submit proforma invoice of their principals. In case the BIDDER is not represented by any Indian Agent the Bank Guarantee valuing **US \$ 72,500.00 (US Dollars Seventy Two Thousand Five Hundred only)** should accompany the Technical Bid towards EMD.
- ii. In case of bids in Foreign Currency, the Indian Representative / dealers can submit the EMD in INR to IISER, Pune without any relaxation.
- iii. The Bank Guarantee is insisted due to steep fluctuations in foreign exchange hence the foreign DD's are not accepted towards EMD. Bids submitted without EMD will stand rejected. EMD will not be accepted in the form of cash /cheque. No interest is payable on EMD.
- iv. The EMD will be returned to the BIDDERS(s) whose offer is not accepted by IISER, PUNE within one month from the date of the placing of the final order(s) on the selected BIDDER(s). In case of the BIDDER(s) whose offer is accepted the EMD will be returned on submission of Bank Guarantee as Security Deposit (SD). However, if the return of EMD is delayed for any reason, no interest / penalty shall be payable to the BIDDERS.
- v. The successful BIDDER, on award of contract / order, must send the contract / order acceptance in writing, within 15 days of award of contract / order failing which the EMD will be forfeited.
- vi. The EMD shall be forfeited: In case a successful BIDDER fails to furnish the Security Deposit.

4. The technical offer **should not contain any price information.**

5. Specifications:

Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected /supported by the printed technical leaflet/literature. Therefore the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.

6. Compliance Statements:

- a) Bidders must furnish a Compliance Statement of each and every required Specification of our tender in the format at ANNEXURE-'B'. The deviations, if any, from the tendered specifications should be clearly brought out in the statement. Technical literature/leaflet showing the compliance of the specification may also be attached with the quotation.

- b) Similarly, the Compliance Statement/questionnaire for Terms & Conditions of the tender may be furnished, as per the enclosed format at Annexure –‘A’, along with quotation (with techno- commercial bid in case of two bid tender system).
- c) The firms are advised to submit both the compliance statements essentially along with their quotation failing which their offer may not be considered.

Envelope 2 : “Commercial Bid” shall contain:

- i. Cost of all the items should be mentioned clearly and individually in the Commercial Offer (Part-II) only.
- ii. The BIDDERS are requested to quote for Educational Institutional Price for Equipment and software, since we are eligible for the same.
- iii. The prices should be shown against each item for the purpose of Insurance claims / replacements if any.
- iv. List of deliverables / Bill of materials and services.
- v. In case of foreign quote, the address of Principal's / Manufacturer's and their Banker's details should be furnished.

Note:

- (i) No request for extension of due date will be considered under any circumstances.
- (ii) No sub-contracting is allowed with regard to installation, commissioning, training, warranty maintenance and after sales service. This is the sole responsibility of the Principals'/their authorized agents

7. IISER Pune may issue corrigendum to tender documents before due date of Submission of bid. The bidder is required to read the tender documents in conjunction with the corrigendum, if any, issued by IISER Pune. The bidder is not supposed to incorporate the amendment in the body of the tender document

8. BID OPENING

- a) Technical Bids will be opened on 20-12-2019 at 15:00 Hrs.
- b) Financial Bids of the eligible bidders will be opened on a later date. The date and time for opening of Financial Bids will be announced later.
- c) Bids would be summarily rejected, if tender is submitted other than through online or **original EMD & tender fee are not submitted within stipulated date / time**. IISER Pune shall not be responsible for any postal delay, EMD & Tender Fee before Tender closing date.

9. Terms of the Technical Committee

- (i) On the due date the Technical bids will be opened and referred to the Technical Committee which is duly constituted by the Director, IISER, Pune. The committee will go through the technical aspects of the tender and recommend short listed firms. The recommendation of the technical committee is the final and binding on all the parties.
- (ii) The technical evaluation will be an assessment of the Technical Bid. IISER, Pune representatives will proceed through a detailed evaluation of the Technical Bids as defined in **Chapter IV (Schedule of requirements, specifications and allied technical details),** in order to determine whether they are substantially responsive to the

requirements set forth in the tender. In order to reach such a determination, IISER, Pune will examine the information supplied by the BIDDERS, and shall evaluate the same as per the specifications mentioned in this tender.

- (iii) The technical committee may formulate evaluation criteria in addition to the specifications and requirements indicated in the tender, in the interest of IISER, Pune and this criteria/recommendation will also form as a part of short-listing of the firms.
- (iv) The Technical Committee will examine all the Technical aspects of the bids received. Further, the Technical Committee may seek additional information from the existing users at IISER, Pune or from other Institutes and also call for Technical presentations from the BIDDERS if it is required so.
- (v) The information received and the bids already submitted together will be examined with reference to the tendered specifications and evaluation is made by the Technical Committee.
- (vi) After the technical evaluation is completed and approved, IISER, Pune shall inform to the BIDDERS whose bids have been rejected technically with the reasons for rejection on e-Procurement Portal (<https://eprocure.gov.in/eprocure/app>).
The commercial offers of the vendors whose technical offers are found to be technically deficient or do not meet the qualification criteria as specified in this tender will be returned to them without opening along with their EMD.
- (vii) The successful BIDDERS will be informed regarding the date and time of Commercial bid opening.
- (viii) The purpose of obtaining two bids (technical and commercial) is to evaluate all the firms on technical basis with reference to the tendered specifications, performance of similar Solutions/Applications elsewhere, obtaining users views with reference to the earlier supplies. This will enable the technical committee to arrive at a fair recommendation in the interest of the organization.
- (ix) In the event of seeking any clarification from various BIDDERS by IISER, Pune, the BIDDERS are required to furnish only technical clarifications that are asked for. No amendment to commercial bid will be entertained at that stage. In case if a BIDDER fails to quote for a particular item it amounts to non-compliance and hence such bid will not be considered for further evaluation. Further during this process if any BIDDER indicates the price during the clarification such bids also will not be considered for further evaluation.

10. Bid Evaluation:

Based on results of the Technical evaluation IISER, Pune evaluates the Commercial Bid of those Bidders who qualify in the Technical evaluation.

- a) IISER Pune shall correct arithmetical errors on the following basis:
 - (i) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.

- (ii) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (iii) If there is a discrepancy between words & figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
- b) Selling exchange rate/equivalent to Indian currency will be as on the date of bid opening in the case of single bidding and the rate on the date of opening of the priced bids in the case of two-part bidding.
 - c) **The bids shall be evaluated on the basis of final landing cost as per format given in Price Schedule in case of import / indigenous items.**
 - d) The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However the CIF/CIP prices quoted by any foreign bidders shall be loaded further as under :
 - Towards customs duty and other statutory levies-as per applicable rates.
 - Towards custom clearance, inland transportation etc. – **2%** of the CIF/CIP value.
 - e) Where the price quoted on FOB/FCA and CIF/CIP basis are the same, the Contract would be made on CIF/CIP basis only.
 - f) The Vague terms like “packing, forwarding, transportation..... etc. extra” without mentioning the specific amount/percentage of these charges will not be accepted. **Such offers shall be treated as incomplete and rejected.**
 - g) After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order.
11. The Director, IISER, PUNE reserves the right to accept the offer in full or in parts or reject summarily or partly.

CHAPTER-2: INSTRUCTIONS TO BIDDERS

1. PREPARATION AND SUBMISSION OF OFFERS:

a) Quotation should be submitted directly by the original manufacturer/supplier or its sole authorized distributor/dealer/Indian Agent. In case of bid by authorized dealer/distributor/Indian Agent, the manufacturer authorization should be attached with the technical bid as per **Annexure-'D'**.

One Indian Agent can participate in a tender on behalf of one manufacturer only. No offer will be entertained if the same Indian Agent is representing another manufacturer for the same item.

b) In case a bidder is not doing business within India, it shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

c) The bidder shall bear all costs associated with the preparation and submission of its bid irrespective of the conduct or outcome of the bidding process.

d) The bidder should not indulge in any corrupt, fraudulent, collusive, coercive practices during the entire process of procurement and execution of contract/order.

e) Before the deadline for submission of the bid, IISER PUNE reserves the right to modify the bidding document and to extend or not to extend the date of submission. Such amendment/modification will be hosted on e-Procurement portal (<https://eprocure.gov.in/eprocure/app>) or on IISER PUNE website.

f) Conditional tenders will be summarily rejected.

2. Delivery Period / Timeliness:

The deliveries & installation must be completed **within 08 -10 Months** from receipt of Confirmed Letter of Credit. The time is the essence of the contract. It is mandatory for the BIDDERS who respond to this bid to meet these expectations, as are tightly linked to IISER, PUNE's plans of completing the project within the time frame.

After completion of the tender process, the successful BIDDER will be expected to survey the proposed operational room to identify any potential sources of power spikes, surges or other electrical interference, or stray AC (alternating currents) fields or vibrations that might affect performance

3. Security Deposit:

3.1 Within fifteen (15) days of the award of contract, the vendor shall furnish a Security Deposit amounting to 10% of the purchase order value in the form of Demand Draft/Bank Guarantee (**from scheduled Bank only**) favoring the Director, Indian Institute of Science Education and Research, Pune.

3.2 The IISER will forfeit the 10% security deposit if vendor fails to execute the order as per the Purchase Order. This Security Deposit will be refunded to the vendor only on successful installation of the EQUIPMENT / SYSTEM.

3.3 The Security Deposit should be valid for a period of warranty period as we plan to extend the same as Performance Bank Guarantee.

3.4 **Bank Guarantee wherever mentioned in this document may be read as “Bank Guarantee from any Scheduled Bank” only.**

4. **Amalgamation/Acquisition etc.:**

In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale of its business to any firm during the contract period, the BUYER/Successor of the Principal Company are liable for execution of the contract and also fulfillment of contractual obligations i.e. supply, installation, commissioning, warranty, maintenance/replacement of spares accessories etc. while submitting your bid, you may confirm this condition.

5. **Bid Validity Period:**

5.1. The prices must be valid at least for a period of **180 days** from the date of opening of the Tender. No changes in prices will be acceptable in any condition after opening of tender till the validity of the offer or execution of the order whichever is later

5.2. IISER, PUNE may ask for the BIDDER's consent to extend the period of validity. Such request and the response shall be made in writing only. The BIDDER is free not to accept such request without forfeiting the EMD. A BIDDER agreeing to the request for extension will not be permitted to modify his bid.

5.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

6. AWARD OF CONTRACT:

Award Criteria

6.1 IISER, PUNE shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid.

6.2 If more than one BIDDER happens to quote the same lowest price, IISER, PUNE reserves the right to award the contract to more than one BIDDER or any BIDDER.

7. IISER Pune Right to vary Quantities at the time of Award:

7.1. The IISER Pune reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the tender document without any change in unit price or other terms and conditions. Further, at the discretion of the IISER Pune, the quantities in the contract may be enhanced by **25%** within the delivery period.

7.2. Firms which have already supplied similar equipment to IISER, PUNE and have not completed required installation/commissioning/after sales service/warranty replacements etc. such firms offers will not be considered for further evaluation and no enquiries thereafter will be entertained.

8. Cargo Consolidation and Customs Clearance:

IISER, PUNE has appointed its own Freight Forwarder and Custom House Agent for all IISER, imports. Please note that all the consignments have to be routed through their associates only. The address and contact details will be provided at the time of placing the Purchase Order. While submitting your bid, you may confirm this condition.

9. **Fraud and Corruption:**

The IISER Pune requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy,

(a) The terms set forth below are defined as follows:

- (i) **“Corrupt practice”** means the offering, giving, receiving, or soliciting, directly or in directly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- (ii) **“Fraudulent practice”** means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- (iii) **“Collusive practice”** means a scheme or arrangement between two or more bidders, designed to establish bid prices at artificial, noncompetitive levels; and
- (iv) **Coercive practice”** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

(b) The IISER Pune will reject a proposal for award if it determines that Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent collusive or coercive practices in competing for the Contract in questio

10. **Interpretation of the clauses in the Tender Document / Contract Document**

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, **Director, IISER, PUNE’s interpretation of the clauses shall be final and binding on all parties.**

CHAPTER - 3 : CONDITIONS OF CONTRACT

1. Prices:

Bid prices should be filled in the appropriate format as mentioned in Price Schedule.

ALL THE BIDDERS SHOULD QUOTE PRICES FOR EACH AND EVERY ITEM SEPERATELY ALONG WITH THE CONSOLIDATED PRICES APPLICABLE FOR BOTH INDIGENOUS AND IMPORTED ITEMS.

A. For Goods manufactured in India:

- (i) The price of goods quoted Ex-Works including taxes already paid.
- (ii) GST and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.
 - (a) The charges for inland transportation, insurance and other local service required for delivering the goods at the desired destination as specified in the price schedule form.
 - (b) The installation, commissioning and training charges including any incidental services, if any.
- (iii) The rate of GST applicable to IISER Pune is 5% for the items procured for Research purpose as per Notification No. 45/2017-Central Tax (Rate) New Delhi, 14th November, 2017 and Notification No. 47/2017-Integrated Tax (Rate) New Delhi, 14th November, 2017

B. For Goods manufactured abroad:

- (i) The price of the goods, quoted on FCA (Named place of delivery abroad) or FOB (Named port of shipment), as specified in the schedule form.
- (ii) The charges for insurance and transportation of the goods to the port/place of destination.
- (iii) The agency commission charges, if any.
- (iv) The installation, commissioning and training charges including any incidental services, if any.

C. We are exempted from payment of Customs Duty under notification No.51/96 dated 23.07.1996. Customs Duty, if any, should be shown separately. No other charges than those mentioned clearly in the quotation will be paid.

D. BIDDERS may also bid for High Sea sales.

2. Bank Charges:

All Bank charges inside India, including opening of LC, to IISER, PUNE Account and outside India to Beneficiary's Account only. In case the BIDDER seeks confirmation of LC such confirmation charges are to the Beneficiary's account. This may please be noted and confirmed.

3. Agency Commission & Services:

3.1. The Indian Agency commission payable in Indian currency only after the receipt of consignment in good condition at our Stores and satisfactory installation and commissioning of the ordered equipment.

- 3.2. In case of foreign quote, the Principal supplier should clearly indicate the address of the Indian Agent and percentage (%) of Agency Commission and taxes if any payable to him. Such amounts will be paid in Indian Currency to the Indian Agent.
- 3.3. Details of services rendered by you as well as after-sales services offered by you are to be made clear in the tender.
4. **Performance Bank Guarantee:**
The 10% Security Deposit which is mentioned above may be extended as Performance Bank Guarantee for a period of warranty period.
5. **Performance Benchmarks:**
The technical evaluation committee needs to be provided with an evaluation system to carry out performance benchmarks.
6. **Pre-installation:**
The BIDDER has to state in detail the Electrical Power/UPS requirements, floor Space, head room, foundation needed and also to state whether Air-conditioned environment is needed to house the system and to run the tests. i.e. pre-installation facilities required for installation may please be intimated in the technical bid. Subsequently, before the consignment lands in IISER, Pune the BIDDER shall confirm that the pre-installation requirements are sufficient for installation of the equipment. In other words the BIDDER should continuously monitor the pre-installation requirements and see that everything is ready before the consignment is taken to the site for installation.
8. **Packing**
The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.
9. **INSTALLATION:**
- 7.1 BIDDER shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter.
- 7.2. Installation demonstration to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the equipment at site.
- 7.3. After successful installation what will be the minimum down time of equipment/instrument in case of breakdown. If the identified firm or person fails to put the system into working condition what is the further alternative course of action suggested by you to adhere to minimum down time.

8. **INSPECTION:**

- 8.1 The inspection of the system will be done by our technical expert /Scientist in the presence of firm's representative.
- 8.2 In case of receipt of the material in short supply or damaged condition the supplier will have to arrange the supplies/ replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR at the IISER. Or CIF basis till satisfactory installation of the system.
- 8.3 The supplier **should arrange for physical inspection of the items directly or through their authorized representative within seven days of arrival of the consignment failing which they will be responsible for the losses.** After the shipment is effected, the supplier/its representative/Indian agents must remain in touch with the lab/instit. to ascertain the date of arrival of consignment.

9. **Training:**

Wherever needed, Our Scientist/Technical persons should be trained by the supplier at the project site free of cost. In case the person is to be trained at supplier's site abroad or in India it should be mentioned in the quotation clearly. The supplier should bear all the expenses for such training including 'to & fro' fares and lodging & boarding charges.

10. **Warranty / Support:**

- 10.1. The items covered by the schedule of requirement shall carry minimum **Three years of comprehensive warranty** from the date of acceptance of the equipment by IISER, PUNE. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours. The comprehensive warranty includes onsite warranty with parts.
- 10.2. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes labor, cost, insurance, freight, custom duty & clearance, local taxes if any should be borne by the beneficiary or his agent. A clear confirmation should be given for this item.
- 10.3. The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost.
- 10.4. The BIDDER shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.
- 10.5. The equipment must be supported by a Service Centre in India manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail.
- 10.6. An undertaking from the manufacturer is required in this regard stating that they would facilitate the BIDDER on regular basis with technology / product updates & extend support for the warranty as well.

- 10.7. The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- 10.8. The principal vendor must have a local logistics support by maintaining a local spares depot in the country of deployment of the equipment. This is to ensure immediate delivery of spares parts from Principal Vendor of equipment to its channel partner/system integrator.
- 10.9. Details of onsite warranty, agency who shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
- 10.10 **COMMENCEMENT OF WARRANTY PERIOD:**
The warranty period of an item shall commence after receipt of the items in good working condition and from the date of its satisfactory installation/commissioning/demonstration at the project site in IISER,, Pune. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.
11. **Reasonability of Prices:**
11.1 Please quote best minimum prices applicable for a premiere Educational and Research Institution,
11.2 The party must give details of identical or similar equipment, if any, supplied to any IITS/IISERS/ CSIR lab/Education Research Institute during last three years along with the final price paid and Performance certificate from them.
12. **Annual Maintenance Contract:**
12.1. The party must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period. This is mandatory to mention, wherever applicable.
12.2. No sub-contracting will be allowed for installation or maintaining system/ equipment / instrument during or after warranty period.
13. **Indemnity:**
The vendor shall indemnify, protect and save IISER, PUNE against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipments supplied by him.
14. **Freight & Insurance:**
14.1. Imports: In case of imports the freight & insurance will be paid by IISER, PUNE, as the consignments are shipped through the IISER, PUNE nominated freight forwarder (applicable only cases of FCA/FOB shipments).
14.2. Indigenous : The equipments to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at IISER, PUNE site in case of Rupee transaction.

15. **Payment:** - **No advance payments are allowed under any circumstances.**

A) INDIGENIOUS

Payment will be made directly to the suppliers by RTGS/NEFT after receipt of the goods, tested /inspected and found satisfactory with regard to quality, quantity, and specifications ordered for and after satisfying that the terms and conditions of supply have been fulfilled.

B) IMPORT

Letter of Credit will be established for 100% order value excluding the Agency Commission due to the Indian Agents, 90% payment shall be made by a, against the presentation of original Shipping documents. Balance 10% will be released after completion of satisfactory installation, commissioning, demonstration of the whole system, after imparting training and upon receipt of Bank Guarantee for 10% of total Order value towards performance security to be valid for till warranty period from the date of installation.

OR

By Wire Transfer for 100% of the Purchase Order value on receipt of goods and completion of satisfactory installation, commissioning, demonstration of the whole system, after imparting training and on submission of 10% Security Deposit/PBG valid till warranty period.

The payment of local currency portion shall be payable in equivalent Indian Rupees, within 30 days after the receipt of the equipment in good condition and after satisfactory installation and commissioning and demonstration.

The Agency Commission to the Indian Agent will be paid in INR only after successful installation, commissioning and satisfactory demonstration and acceptance of the items ordered for by the end user.

16. **Penalty for delayed Services / LD:**

16.1. As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the IISER will forfeit EMD/SD and also LD clause will be applicable /enforced.

16.2. If the supplier fails to Supply, Install and Commission the system as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

16.3. IISER, PUNE reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Security Deposit.

17. **Jurisdiction:**

The disputes, legal matters, court matters, if any, shall be subject to Pune Jurisdiction only.

18. **Force Majeure:**

The Supplier shall not be liable for forfeiture of its performance bank guarantee, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may

include, but are not limited to, acts of the IISER Pune either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the IISER Pune in writing of such conditions and the cause thereof. Unless otherwise directed by the IISER Pune in writing, the Supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

19. **Dispute Settlement:**

IISER Pune and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the IISER Pune or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (a) In case of Dispute or difference arising between the IISER Pune and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director IISER Pune, if he is unable/ unwilling to act, to the sole arbitration of some other person appointed by his willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- (b) In the case of a dispute between the Purchase and a Foreign supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

The venue of the arbitration shall be the place from where the purchase order or contract is issued.

Assistant Registrar (S&P)

CHAPTER 4

TENDER NOTIFICATION FOR THE PROCUREMENT OF ELECTRON MICROSCOPES, SUITABLE CAMERAS AND RELATED ACCESSORIES FOR SETTING UP OF AN ELECTRON MICROSCOPY FACILITY AT IISER PUNE

Technical specifications

Introduction and Summary:

- I. The contractor will manufacture, supply, deliver, position, install, test and commission one 300 kV (three hundred kilovolts) and one 120 kV (one hundred and twenty kilovolts) Transmission Electron Cryo-Microscope (Cryo-TEM) for Life Sciences at the Indian Institute of Science Education and Research, Pune.
- II. The 300 kV Cryo-TEM covered by this specification will provide IISER Pune with the state-of-the-art, high-resolution electron cryo-microscopy for a wide variety of research applications, optimized for automated single particle analysis and electron cryo-tomography. The 120 kV Cryo-TEM covered by this specification will provide IISER Pune with the state-of-the-art, electron cryo-microscopy for a wide variety of research applications, for sub-nanometer cellular and structural studies; optimized also for automated single particle analysis, electron tomography.
- III. The Cryo-TEMs will be used to conduct research in the areas of structural biology and cell biology, and will involve the recording of images of unstained, rapidly-frozen thin films or high-pressure frozen and sectioned biological material, with specimen thicknesses up to 1 μm (one micrometre).
- IV. The 300 kV Cryo-TEM having a voltage range of 80 – 300 kV (eighty to three hundred kilovolts) will be equipped with a high DQE electronic camera (specification as mentioned below). A back-thinned direct electron detector type of camera is required. Moreover, the size of the sensor should be at least 4Kx4K (four thousand by four thousand) pixels.
- V. The 120 kV Cryo-TEM having a voltage range 40 – 120 kV (forty to one hundred and twenty kilovolts) will be equipped with a CMOS camera (specification as mentioned below). Moreover, the size of the sensor should be at least 4Kx4K (four thousand by four thousand) pixels.

Electron Microscope Specification & Function

- I. The Cryo-TEMs installed at IISER Pune will be part of a Pune Biocluster available to multiple users ranging from expert to non-expert users. The Cryo-TEMs offered in the submitted documentation will be expected to be intuitive, user-friendly, robust and adaptable with the capability to accept future upgrades and improvements.
- II. The proposed Cryo-TEMs will be fitted with controls that are simple enough to be understood by a 'non-expert' user and robust enough for heavy daily use, usually for 24 (twenty four) hours per day and 7 (seven) days per week.
- III. It is expected that all day-to-day controls incorporated into the proposed system will be clearly labelled and intuitive enough for a 'non-expert' user.
- IV. It would be desirable for advanced controls to be 'hidden' so that use is limited to expert users or service engineers. A software design to allow different level of users in terms of control and safety is desirable.
- V. The insertion of the specimen into the Cryo-TEM vacuum *via* the air lock should be quick and can be inspected, an image focused and recorded and the grid removed ready for a new specimen, all within a cycle time of 30 (thirty) minutes.

Specifications for 300 kV Cryo-TEM:

- I. 300 kV Cryo-TEM with operation range between 80-300 kV (eighty to three hundred kilovolts) (variable either in steps or continuously). The submitted documentation should clearly state the range of the system proposed by the BIDDER.
- II. It is expected that the 300 kV Cryo-TEM has fully automatic differential oil free pumping system and ion pumps. The system should have sufficient number of Ion Getter Pumps Column, Gun and Specimen chamber. Suitable vacuum pump for Camera Section should be provided. Fully automatic sequential control for operation of vacuum pumps is required. Pumping time from start to ultimate vacuum should be less than 60 minutes. FEG gun area vacuum should have pressure $\leq 10^{-7}$ Pa and Cryo-TEM column area vacuum should be $\leq 10^{-6}$ Pa.
- III. It is essential that the 300 kV Cryo-TEM should have an automatized system to load multiple (4 or more) grids simultaneously into the Cryo-TEM and examined successively without breaking the vacuum. The grid

- exchange mechanism is expected to be highly automatic and reliable, suitable for high-throughput and free of ice contamination.
- IV. One additional set of auto grid loading system accessories that are delivered with the Cryo-TEM e.g. assembly workstation, loading dock, tweezers, transfer dewars etc. should be provided.
 - V. The specimen tilt angle for the Cryo-TEM should be able to tilt the specimen at least $\pm 70^\circ$ (plus and minus seventy degrees) for single axis tilting. The presence of dual axis is optional and not an essential feature.
 - VI. It should be possible to use well established low dose imaging procedures, in which there are separate preset Search/Focus/Exposure conditions. The Search mode usually involves using a low magnification and very low dose rate, during which a grid is searched for suitable areas for later imaging at higher magnification. The Focus mode involves accurate focusing, normally at a higher magnification than used for the final exposure, on one or more adjacent areas of the specimen that are near the central area selected for later imaging. The Exposure mode is then used to record an exposure of the selected areas with minimal preirradiation. This would be the mode used for recording the highest quality images with minimum radiation damage either due to frozen-hydrated biological specimens or other radiation sensitive specimens. Details of the proposed low dose imaging system should be included in the submitted documentation.
 - VII. IISER Pune will wish to link the data storage of the proposed Cryo-TEM to its existing site-wide network so that remote access to, and analysis or manipulation of, data and images is available to users while the Cryo-TEM is collecting primary data. The expectation of IISER Pune is that the proposed system will have a high-speed transmission capacity, e.g. 10 Gigabit/second (ten) Ethernet or equivalent.
 - VIII. A fully motorized X-Y sample stage should be provided as part of the proposed Cryo-TEM, so that regions of interest can be identified, stored and quickly recalled with high reproducibility. Graphical indication of specimen grid position is desirable.
 - IX. For the 300 kV Cryo-TEM, IISER Pune expects the energy spread of the electron beam to be ≤ 1.0 eV (less than or equal to one point zero electron volts). The expectation of IISER Pune is that the proposed Cryo-TEM will be fitted with a field emission gun (FEG) to generate an appropriate operational electron beam with high brightness, high coherence, and high stability for high-resolution imaging.
 - X. The 300 kV Cryo-TEM should be factory aligned at 80, 200 and 300 (eighty, two hundred and three hundred kilovolts) kV.
 - XI. During cryo-EM use, the ice contamination rate should be ≤ 0.7 nm/hr (zero point seven nanometer per hour).
 - XII. The Cryo-TEM system proposed by the BIDDER will be expected to have a point resolution of at least 0.25 nm (zero point two five nanometers), and a line resolution of at least 0.14 nm (zero point one four nanometers).
 - XIII. The Cryo-TEM should be fitted with intermediate and projector lenses offering the following characteristics: the minimum range of camera lengths in diffraction mode should be 300 mm (or less) to 5000 mm (or greater) (three hundred to five thousand millimeter) at 300 kV (three hundred kilovolts). The lens combination should offer a magnification range of at least 50x – 450,000x (fifty to four hundred and fifty thousand times). Magnification should be reproducible to within $\pm 1.5\%$ (one point five percent) and rotation free, using a standard sample. The submitted documentation should clearly state the range of the proposed system.
 - XIV. The system should be provided with constant power objective lenses that have a low hysteresis design. There should be minimal crosstalk between optical components and fast switching between different operational modes.
 - XV. The proposed Cryo-TEM should be fitted with the following aperture holders: an objective aperture holder, with at least one aperture appropriate for different imaging conditions; two condenser aperture holders (C1 and C2), each with at least four apertures; a selected area aperture holder, with at least four apertures. In addition, it is desirable that all aperture holders must be motorized, to maximize the degree of automation.
 - XVI. The Cryo-TEM should be equipped with **phase plate** and the document should clearly mention the type of phase plate and where it is housed.
 - XVII. The Cryo-TEM should either have an in-column or post-column energy filter. The energy filter (EF) will be used mainly for zero energy-loss imaging of biological samples (most often frozen protein samples or sectioned frozen biological materials or whole cells) and, less frequently, for electron energy loss spectroscopy (EELS). Energy resolution is expected to be 10 eV (ten electron volts) (or better) for imaging and 1 eV (one electron volt) (or better) for spectroscopy. The EF should have minimal geometrical distortions, preferably less than 1% (one percent). The alignment and tuning of the filter is expected to be as automatic as possible.
 - XVIII. The filter is expected to be well-screened from any ambient low-level AC magnetic fields and can be adjusted/aligned to compensate for the effect of stray AC fields in the ambient environment of the Cryo-TEM room for voltages of 80 – 300 kV (eighty to three hundred kilovolts).

- XIX. In the case of a **post-column energy filter**, IISER Pune expects the proposed 300 kV Cryo-TEM to be equipped with a high DQE electron detection camera after the energy-filter for high-resolution data recording. Specifications for the detector are given below.
- XX. In the case of an **in-column energy filter**, IISER Pune expects the proposed 300 kV Cryo-TEM to be equipped with a high DQE electron detection camera for high-resolution data recording. Specifications for the detector are given below.
- XXI. It is essential that the performance of the combined cryo-EM and energy filter instrument operating in zero energy-loss mode should meet the following objectives:-
- (i) It should be possible to observe Thon rings in a high-dose image from an amorphous carbon or Pt-Ir specimen out to the Nyquist resolution in the Fourier transform of an image that is at least 4Kx4K (four thousand by four thousand) pixels.
 - (ii) Chromatic aberration (image blurring) should be less than 1 pixel/10eV (one pixel per ten electron volt) energy spread over the full field of view.
 - (iii) Geometrical distortion should be < 1% (less than one percent) over the full field of view.
 - (iv) Non-isochromaticity should be less than 2 eV (two electron volt) over the full field of view.
 - (v) It should be possible to use the EF at 80, 200 and 300 kV (eighty two hundred and three hundred kilovolts). The filter alignments for above voltages are expected to be provided.
- XXII. In the submitted documents, the BIDDER should provide details of any auto-focus / assisted-focus capability that can be offered with the Cryo-TEM.
- XXIII. In the submitted documents, the BIDDER should provide details of any auto-drift compensation system that can be offered with the Cryo-TEM.
- XXIV. An automatic filling system for liquid nitrogen should be provided. 2 X 240 L Liquid nitrogen dewars should be provided. Details of the proposed anti-contamination device should be included in the submitted documentation.
- XXV. The proposed Cryo-TEM will be fitted with a sample stage that is appropriate for the multiuser requirements of IISER Pune and suitable for both cryogenic and ambient temperature use. The following features of the sample stage should be addressed in the submitted documentation: The sample stage will be computer controlled with a range of movement specified in mm for the X, Y and Z axes. The stage position should be reproducible: after a specimen movement of 500 (five hundred) μm in x and y, the stage should relocate sample position with a reproducibility of $\leq 0.5 \mu\text{m}$ (less than or equal to zero point five micrometers). Minimum movement increments should be less than $0.5 \mu\text{m}$ (zero point five micrometers) in X and Y directions and 0.5° (zero point five degree) tilt. The minimum tilt range expected by IISER Pune is $\pm 70^\circ$ (seventy degree). The maximum sample drift rate should be 0.01 nm/s (zero point zero one nanometer per second) after complete equilibration. At 30 (thirty) minutes after specimen exchange, the specimen drift rate should be $\leq 0.25 \text{ nm/s}$ (less than or equal to zero point two five) nm/s ; and $\leq 0.05 \text{ nm/s}$ (less than or equal to zero point zero five) nm/s at 90 (ninety) minutes after specimen exchange. The specimen height should be adjustable to allow eucentric tilting. The eucentricity during $\pm 70^\circ$ tilting should be $\leq 2 \mu\text{m}$ (less than or equal to two micrometers) in X and Y, and $\leq 4 \mu\text{m}$ (less than or equal to four micrometers) in Z (defocus change). Details of the proposed Cryo-TEM system capabilities against each of the above features should be included in the submission documents.
- XXVI. The proposed Cryo-TEM system should be supplied with an appropriate tracking system. This tracking system should be capable of recording the specimen areas of the specimen that have been viewed, to prevent repeated imaging of the same sample area. Details of the proposed tracking system should be included in the submitted documentation.
- XXVII. The temperature of the frozen specimen in the Cryo-TEM column should be $\leq 105\text{K}$ (less than or equal to one hundred and five Kelvin), and the lifetime of a frozen-hydrated specimen should be at least 2 (two) days in the Cryo-TEM column without detectable deterioration.
- XXVIII. All essential ancillary equipment for the Cryo-TEM, such as water chiller(s) or air compressor and at least a 30 kVA (thirty kilovolt-ampere) power backup (UPS) sufficient for uninterrupted operation for at least 30 minutes in case of power failure should be included as part of the tender proposal.
- XXIX. A fast CMOS camera is expected just beneath the fluorescence screen which can be used for single-particle, tomography and micro-electron diffraction. The size of the sensor should be at least $4\text{K} \times 4\text{K}$ (four thousand by four thousand) pixels. This general-purpose camera is expected to be either retractable or in a near-axis position and housed in a manner compatible with easy and

automated operation with a direct detection camera (Specification mentioned below). The camera should be fully embedded with data collection/application software and hardware.

PC Hardware and Software

- XXX. Standard and suitable PC for operation of the Cryo-TEM should be provided along with a laserjet colour printer. Standard and suitable PC Hardware and Softwares for the operation of the Cryo-TEM should be provided. PC should be factory fitted and tested with pre-loaded, licensed softwares for trouble free operation of the system. All softwares offered should be licensed.
- XXXI. Option for high speed attached RAID storage for the PC (using Fibre Channel) should be available.
- XXXII. The software provided to IISER Pune as part of the proposed Cryo-TEM system will include a range of 'pre-configured' settings that can be easily selected for use with the appropriate 'standard' samples. This could be demonstrated during the application support time.
- XXXIII. The software provided as part of the proposed Cryo-TEM system will allow multiple users to use the system, each with individual logins, user profiles, saved settings and acquisition protocols. This should be confirmed in the submission documentation.
- XXXIV. IISER Pune requests that the BIDDER provide basic details of the security settings that can be applied to each individual user and, where appropriate the degree of adjustment that can be made by any user within the preset security.
- XXXV. IISER Pune will expect that the acquired data & metadata can be exported from the proposed Cryo-TEM system in multiple formats (eg .mrc, .tiff, .jpeg, .txt, .xls etc). Details of the proposed software should be included in the tender submission along with any known, or suspected, incompatibilities with other software packages.
- XXXVI. IISER Pune will expect the software package provided with the Cryo-TEM to include a 'browser' version to allow users an "off-line" capability to view images, export data & images as well as carrying out basic processing & analyzing functions. It is expected that such a browser would be free, or of minimal cost, and ideally available for Windows, Mac and Linux operating systems. Details of the proposed software should be included in the tender submission.
- XXXVII. The software provided to IISER Pune as part of the proposed system may also allow images & data to be exported in proprietary formats. Details of any such proprietary software should be included in the submission documents.
- XXXVIII. The software and hardware provided should also allow the remote controlled operation, including remote diagnosis and servicing.
- XXXIX. The software controlling all detectors/cameras is expected to be fully embedded into the Cryo-TEM's operation system. The safety controls must be implemented in software as well as in hardware for protecting the operators, instrument and specimens.
- XL. Use of open source softwares e.g SerialEM should be permissible without affecting warranty of the equipment.
- XLI. Automatic image acquisition software for single particle, tomography cryoCryo-TEM and electron diffraction including the latest upgrades/updates is expected to be supplied free of cost, installed and supported by the provider. Details of the proposed software should be included in the tender submission along with any known, or suspected, incompatibilities with other software packages. Automatic image acquisition software should be provided free of cost. Automatic image acquisition software should be compatible with direct electron detection camera.
- XLII. The software provided to IISER Pune should be updated as and when available.
- XLIII. The software provided to IISER Pune is expected with full documentation.
- XLIV. Separate unit should be provided for offline data analysis and High Speed storage appliance with capacity preferably of 600 TB or more.

Direct electron detector camera for 300 kV Cryo-TEM:

- I. Direct detection camera having the following features/specifications should be provided. Radiation hardened back-thinned sensor with sensor lifetime of at least 500million e/pix. Complete software for all camera functions, low dose readout and low dose automated data acquisition. Automated magnification calibration and adequate safety measures for camera should be available. Real time fast Counting and Super resolution or integration read out modes should be available. Sensor size should be at least 4K x 4K (four thousand by four thousand) pixels. Sensor read out should be 1000 full fps or better.
- II. The physical pixel size of the detector is expected to be smaller (5 microns) with a sensor read out of at least 1000 frames per second.
- III. The detector and software provided should be able to do sub-pixel averaging for more accurate determination of incident electrons.

- IV. It should be possible to observe Thon rings in a high-dose image from an amorphous carbon or Pt-Ir specimen out to the Nyquist resolution in the Fourier transform of an image that is at least 4K x 4K (four thousand by four thousand) pixels.
- V. Camera compatibility should be ensured for either the in-column or post-column energy filter as per the Cryo-TEM specification above.
- VI. Standard and suitable PC Hardware and Softwares for the operation of the direct detection camera should be provided. PC should be factory fitted and tested with pre-loaded, licensed softwares for trouble free operation of the system. All softwares offered should be licensed.
- VII. Option for high speed attached RAID storage for the PC (using FibreChannel).
- VIII. The software provided to IISER Pune as part of the proposed the System will include a range of 'pre-configured' settings for operating voltages between 80 and 300 kV (eighty and three hundred kilovolts) that can be easily selected for use with appropriate 'standard' samples. This should be confirmed in the submission documentation. BIDDER should provide software for automatic data collection for single particle analysis and tomography and update it as and when required. IISER Pune expects that the BIDDER should provide this free of cost and update the software time to time basis.
- IX. IISER Pune expects that the images, data and metadata acquired, and subsequently analyzed and/or manipulated, by the user will be saved in a default format that is widely compatible with other software packages. Details of the proposed software should be included in the tender submission along with any known, or suspected, incompatibilities with other packages.
- X. BIDDER should provide a proper frame alignment software to align the movie frames of collect movie images using the detector .
- XI. It is expected that the acquired data & metadata can be exported from the proposed detector in multiple formats (eg .mrc, .tiff, .jpeg, dm3, .txt, .xls etc). Details of the proposed software should be included in the tender submission along with any known, or suspected, incompatibilities with other software packages.
- XII. IISER Pune will wish to link the data storage of the proposed PC to its existing sitewide network so that remote access to, and analysis or manipulation of, data and images is available to users while the detector is collecting primary data. It is expected that the proposed system will have a high-speed transmission capacity (e.g. 10Gb/s (ten Gigabit/second) Ethernet or equivalent).
- XIII. The software controlling the detectors is expected to be fully embedded into Cryo-TEM's operation system. Automatic data collection and image acquisition, and camera control should be from the same software platform.
- XIV. The safety controls must be implemented in software as well as in hardware for protecting the operators, instrument and specimens.
- XV. Automatic single particle analysis and tomography data acquisition software(s) is(are) expected be provided and embedded. Details of the proposed software(s) should be included in the tender submission along with any known, or suspected, incompatibilities with other software packages. The software(s) provided to IISER Pune should be updated during annual servicing with available updates. The software(s) provided to IISER Pune is expected with full documentation.

Specifications for 120 kV Cryo-TEM:

- I. **Acceleration voltage:** 20 kV - 120 kV (variable either in steps or continuously). HV variation should be quick and with auto alignment.
- II. **Electron Source:** W/LaB6 thermionic Gun
- III. **Resolution:** Point to Point Resolution at least 0.4 nm or better and Lattice/Line Resolution 0.2 nm or better. Pole piece gap should be compatible for tomography, and Cryo operation. Minimum Spot size should be 0.2 μ m diameter or less.
- IV. **Specimen chamber:** Eucentric Goniometer fully motorized stage with all 4 axis (XYZ α) with accurate specimen position recall and retrieve facility. Goniometer stage should accept variety of specimen holders including heating, cooling, and low background double tilt holder. Specimen tilt angle at least \pm 70 degree or more with standard single tilt holder / high tilting specimen holder. Specimen Movement (X, Y axis) : Motor-driven X,Y Movement range +/-1 mm, Z axis : Motor-driven Movement range +/-0.5 mm, Controlled with the trackball or pushbutton switch
- V. **Automation:** Should be possible to align both electron gun and beam at selected acceleration voltages and recall that for automatic alignment while switching from one acceleration voltage to another. This should be possible for at least 3 selected acceleration voltages, such as 40 kV, 80 kV & 120 kV.
- VI. **Operation mode:** Cryo-TEM (Bright field and dark field). Cryo as well as room temperature specimens. Micro- Probe and Nano -Probe, Selected Area Diffraction including Micro and Nano diffraction.
- VII. **Camera Specifications:** Bottom mounted CMOS Camera 16 mega pixels, sensor size (pixels) : at least 4K x 4K (four thousand by four thousand) pixels, dynamic range with frame accumulation: \geq 16 (greater than or equal to sixteen) bit. Camera Length for diffraction should be at least \leq 50 mm (less than or equal to fifty millimeter) to \geq 2000 mm (greater than or equal to two thousand millimeter).

- VIII. A fluorescence screen should be provided just above the CMOS camera.
- IX. High Speed Camera Link Digital Interface for camera data transfer and control should be available. Camera should be usable at 20-120 kV (twenty to one hundred and twenty kilovolts). Should have CMOS sensor with built-in shutter. Sensor active area should be $\geq 2000 \text{ mm}^2$ (greater than or equal to two thousand millimeter square), and pixel size at least 12 (twelve) micrometers.
- X. Recording modes should include both "image" and "video". It should be possible to do in-line data processing with real time drift correction at 20 fps (twenty frames per second).
- XI. Real-time FFT with spatial and temporal filtering. User-friendly software integrated with Cryo-TEM system software along with measurement and diffraction analysis package as standard feature.
- XII. **Vacuum system:** Fully automatic differential oil free pumping system preferentially with turbo molecular pump backed up by rotary pump. Vacuum should be suitable for single particle, tomography, cells and tissue sections and EDS analysis. Electron gun area vacuum should have pressure $\leq 10^{-6}$ Pa and Cryo-TEM column area vacuum should be $\leq 10^{-5}$ Pa.
- XIII. **Lens System:** Four stage lens system consisting of condenser lens, objective lens, intermediate lens and stigmator projector lens. Objective lens with upper and lower pole pieces (double objective lens with objective lens and objective mini-lens). Distortion and rotation free images should be possible to acquire.
- XIV. **Viewing Chamber:** Viewing window should be at least $250 \times 170 \text{ mm}$ with beam stopper for Diffraction Analysis.
- XVI. **Computer:** Standard and suitable PC Hardware and Softwares for the operation of the Cryo-TEM should be provided. PC should be factory fitted and tested with pre-loaded, licensed softwares for trouble free operation of the system. All softwares offered should be licensed.
- XV. **3D Tomography:** Facility for 3D tomography and holders for 3D tomography. This should include hardware and relevant software's for automatic acquisition and montage of images in Cryo-TEM and STEM modes of operation, along with 3D reconstruction. It should also be applicable to EDS to obtain 3D distribution of elements. All softwares offered should be licensed.
- XVI. **Cryo-holder:** A cryo-holder compatible with the 120 kV Cryo-TEM should be provided for holding single sample at cryo-temperatures for at least 8 (eight) hours. Another cryo-holder compatible with the 120 kV Cryo-TEM should also be provided for holding multiple samples at cryo-temperatures for at least 3-4 (three to four) hours. It should be compatible with single axis tilting of $\pm 70^\circ$ (seventy degree). It should come with loading station, pumping station, temperature controller and other required accessories for smooth operation.
- XVII. Any essential ancillary equipment for the Cryo-TEM, such as water chiller(s) or air compressor and at least a 10 kVA (ten kilovolt-ampere) power backup (UPS) sufficient for uninterrupted operation for at least 30 minutes in case of power failure should be included.

Glow discharge system/plasma cleaner:

The Glow Discharge Unit should allow hydrophobic/hydrophilic conversion and hydrophilic/hydrophobic conversions of grids. The design of the unit should allow safe operation with appropriate safety interlocks along with easy-to-use user interface.

Sputter coater:

A separate carbon/metal coater unit should be provided to prepare carbon coated or carbon/metal coated grid for cryo-EM purposes. It should be equipped with a Turbo Pump to reach high vacuum.

4. Training

- I. All user training on the operation of the proposed Cryo-TEM systems will be conducted at IISER's premises in Pune by qualified Application Specialist.
- II. Initial training will be provided to a small number (~five) personnel with the emphasis being on both theory and practical training in a small group to enable users to benefit from any advanced features of the two Cryo-TEM systems.
- III. Initial maintenance training will be also provided to 2 (two) personnel allowing basic procedures to be carried out in-house to maximize the potential uptime of the proposed Cryo-TEM systems.
- IV. Should any revised software or hardware be installed on the two Cryo-TEM systems, then appropriate user training will be carried out by the BIDDER at the time of installation.
- V. The expectation of IISER Pune is that the BIDDER can provide on-going support to IISER Pune system users and/or system maintenance personnel via a help desk, or similar arrangement, to maintain the optimal functionality and usability of the proposed Cryo-TEM systems. In the tender response therefore, please advise what support can be offered, if not

operating on a 24/7 (twenty four hours seven days per week) basis, please also state the times when such support would be available.

- VI. It is expected that comprehensive operational procedures, SOPs and technical manuals will be provided for the proposed system(s).
- VII. The quoted system configuration by the BIDDER should have exceptional publication record in structural and cell biology field and should have multiple worldwide installations with appropriate contact details for referrals concerning user experience, maintenance issues and any other aspect as deemed fit by the technical committee.
- VIII. The two Cryo-TEM systems should be provided with software to automatically perform daily tuning of the system; therefore enabling less experienced user to approach the Cryo-TEM systems with ease. The automatic alignment available should at least include: Full Gun Alignment, Eucentric Height, coma-free and automatic objective stigmation. The Cryo-TEM provider should also engage in developing software aimed to complete automation of the systems.

Warranty

- I. The items covered by the schedule of requirement shall carry minimum **3 (three) years of comprehensive warranty** from the date of acceptance of the equipment by IISER, PUNE. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The comprehensive warranty includes onsite warranty with parts, labor charges.
- II. Warranty items will be sent free and shall be custom cleared by Bidder along with concessional custom duty. Necessary documents for custom clearance will be provided by IISER Pune.
- III. During the comprehensive warranty period, IISER Pune will expect a maximum on-site attendance time of 24 (twenty four) hours from first notification of a problem/defect with the two Cryo-TEM systems and a maximum fix time of 5 (five) days from first notification. If not attended for a period of 2-3 days, then the comprehensive warranty will be extended by 1 month accordingly.
- IV. The equipment must be supported by a Service Centre in India manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail.
- V. The BIDDER will also include within the tender their current average on-site attendance time that has been achieved in responding to unplanned breakdowns plus their current average fix time to complete such repairs to equivalent Cryo-TEMs installed at other locations in the India or outside of India.

Maintenance & Service:

- I. The BIDDER will specify the appropriate planned preventative maintenance program, including the scheduled down time, in their tender response for the proposed Cryo-TEM systems.
- II. All preventative maintenance work on the proposed Cryo-TEM systems will be pre-arranged during normal working hours with minimum down time of the equipment.
- III. The BIDDER shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.
- IV. The BIDDER will also include within their tender response a list of spare parts (plus unit prices) it intends to hold and/or holds as normal stock on behalf of the IISER Pune to ensure that downtime of the proposed Cryo-TEM systems is not prolonged due to unavailability and also to replenish the items recommended to be held by the IISER Pune.
- V. The BIDDER will include in their response, details of initial service and maintenance training that will be provided to representatives of the IISER Pune necessary to ensure the satisfactory, safe and efficient operation of the proposed Cryo-TEM systems and this will be included in the tender price.
- VI. The BIDDER will include in their response, details of ongoing service and maintenance training that can be provided to representatives of the IISER Pune necessary to ensure the satisfactory, safe and efficient operation of the proposed Cryo-TEM systems.

Accessories, Consumables and spares parts:

- I. Adequate accessories, spares and tools (for at least three years), which is immediately required for proper testing, use and maintenance of the two Cryo-TEM systems (which includes the cameras) should be provided by BIDDER.
- II. Sufficient consumables that may be required for loading the cryo grids and different types of grids should be provided by BIDDER.

Miscellaneous:

- I. The BIDDER should provide the number of installations of similar configuration in India or abroad (at least 3 or more) with their contact details.
- II. It is desirable that BIDDER should provide an on-site engineer at IISER Pune, who will be always available at IISER, and provide a service whenever it is required for Cryo-TEMs.
- III. The BIDDER should specify that the hardware components and the software meant to handle the Cryo-TEM would not go obsolete for at least five years and the required spares would be available for at least ten years. A statement/letter to that effect may be included alongside the tender.

Costs:

- I. The tender response will provide a total life cost for the proposed Cryo-TEM systems over a period of 10 (ten) years.
- II. This costing will include, but not be limited to, the costs of power consumption, maintenance, spare parts and consumables.
- III. Cost for hardware and/or software upgrades should be excluded from this calculation (and may be listed separately).

Safety Issues:

- I. It is expected by IISER Pune that the proposed Cryo-TEM systems will be designed and manufactured to enable CE marking to be applied to the equipment.
- II. The design of the proposed Cryo-TEM systems will facilitate easy use, safe cleaning and incorporate appropriate interlock systems to prevent danger to the users.
- III. Any exposed and/or working surface on the proposed Cryo-TEM systems will be smooth, with reduced corners and no sharp edges to ensure user protection as well as ensuring that all surfaces are easy to clean.

Environmental Issues:

- I. The average power usage of the two complete Cryo-TEM systems being proposed should be stated in the submitted documentation based on a 24 (twenty four) hour working day and 7 (seven) day working week, including any proposed different configurations, and should be stated in kW (kilowatts).

Note: this calculation will exclude the costs for both air conditioning and lighting of the room in which the two Cryo-TEM systems will be installed.

- II. The tender response will be expected to state clearly the maximum heat output of the proposed Cryo-TEM systems, including chillers, to allow the air conditioning requirements for the identified installation room to be checked in advance of installation.

Note: if there will be a significant difference between standby and full operation, details should also be included in the tender document.

Operational Room:

The BIDDER should specify room requirements for operation of the two Cryo-TEM systems including, but not limited to, the following criteria (using given units where applicable): Temperature ($^{\circ}\text{C} \pm ^{\circ}\text{C}$); humidity ($\% \text{RH} \pm \% \text{RH}$); noise (dB); vibration (Dm/s for 1-500Hz); AC stray magnetic fields (nT p-p at 50Hz); Space requirement detailing room and door dimensions.

Design Proposal:

- I. The BIDDER will propose one, or more, Cryo-TEM solution(s) to IISER Pune including the design, selection and sizing of all components and equipment to be used, such that they will provide a working and complete installation to satisfy IISER Pune stated requirements for full operational functionality in the identified working environment.
- II. The BIDDER will be responsible for ensuring the compatibility and integration of all parts of the proposed Cryo-TEM system.
- III. This will include all hardware and software whether they are provided by the BIDDER, a subsidiary or related organization or an independent third party.
- IV. The BIDDER will be fully responsible for the proposed design and liable for any mistake, inaccuracy, discrepancy or omission in their proposed solution to the stated IISER Pune requirements.
- V. Nothing contained in the BIDDER's design or proposal will relieve the BIDDER from their obligations or liabilities detailed within this document, and agreed or contained within any final contract documentation.

Equipment Programme:

The following is a summary of the target programme dates for this project:

Note: this is subject to change and is to be used for guidance only.

- I. IISER Pune will agree with the Cryo-TEM delivery programme with the BIDDER when the contract is awarded.
- II. Earliest order for Cryo-TEM systems placed with the BIDDER: December 2019
- III. Delivery and start of Cryo-TEM systems installation by the BIDDER: September 2020
- IV. Commencement of Cryo-TEM systems commissioning by the BIDDER: October 2020
- V. Completion of Cryo-TEM systems commissioning by the BIDDER and hand-over to IISER Pune: November 2020
- VI. The BIDDER will indicate in their tender response prospective dates or lead times for equipment delivery, site installation and commissioning plus handover. The BIDDER should clearly mention proper location of shipment of the whole equipment at any time. In their quotation, BIDDER should mention exact location of the shipment of the complete Cryo-TEM systems and later on BIDDER should not change the location of shipment. The BIDDER should pay more attention and clarify these issues at beginning. IISER Pune is expecting a hasslefree procedure from BIDDER to export and install the instrument.
- VII. Should there be any perceived significant risk to the predicted lead time due to occurrence then the BIDDER will be expected to advise a revised timescale .
- VIII. In the event of a delay to an individual component part or module of the system potentially causing excessive delay to the delivery of the complete Cryo-TEM systems, then the BIDDER will be expected to advise on the practicality of installing the system without that part along with a revised timescale for fitting and integration of that part when it will be available.

Serial No.	SPECIFICATIONS	Marks
1	300 kV (three hundred kilovolts) Cryo-TEM	
1.10	Operation range between 80-300 kV (eighty to three hundred kilovolts) (variable either in steps or continuously). Software to operate the system, record data, store data and for analysis should be provided.	7
1.11	Automatized system to load multiple (4 or more) grids simultaneously into the Cryo-TEM and examined successively without breaking the vacuum.	5
1.12	One additional set of auto grid loading system accessories that are delivered with the Cryo-TEM e.g. assembly workstation, loading dock, tweezers, transfer dewars etc. should be provided.	5
1.13	Energy spread of the electron beam ≤ 1.0 eV (less than or equal to one point zero electron volts).	3
1.14	Fitted with a fieldemission gun (FEG) to generate an appropriate operational electron beam with high brightness, high coherence, and high stability for high-resolution imaging.	3
1.15	Factory aligned at 80, 200 and 300 kV (eighty, two hundred and three hundred kilovolts).	3
1.16	Ice contamination rate ≤ 0.7 nm/hr (zero point seven nanometer per hour).	3
1.17	Magnification range of at least 50x – 450,000x (fifty to four hundred and fifty thousand times).	3
1.18	Cryo-TEM equipped with phase plate.	6
1.19	Cryo-TEM equipped with in-column or post-column energy filter.	6
1.20	Specimen tilt angle for the TEM should be able to tilt the specimen at least $\pm 70^\circ$ (plus and minus seventy degrees) for singleaxis tilting.	3
1.21	Chromatic aberration (image blurring) should be less than 1 pixel/10 eV (one pixel per ten electron volt) energy spread over the full field of view. Non-isochromaticity should be less than 2 eV (two electron volt) over the full field of view. Geometrical distortion should be < 1% (less than one percent) over the full field of view.	3
1.22	Maximum sample drift rate after complete equilibration = 0.01 nm/s (zero point zero one nanometer per second).	2
1.23	Temperature of the frozen specimen in the Cryo-TEM column ≤ 105 K (less than or equal to one hundred and five Kelvin), and the lifetime of a frozen-hydrated specimen should be at least 2 (two) days in the Cryo-TEM column without detectable deterioration.	3
1.24	Equipped with at least a 4K X 4K (four thousand by four thousand) pixels fast CMOS camera for single-particle, tomography and micro-electron diffraction with software for camera control.	4
1.25	Automatic filling system for liquid nitrogen and 2 x 240 L liquid nitrogen dewars provided.	3

2	Direct electron detector camera for 300 kV Cryo-TEM:	
2.1	Radiation hardened back-thinned sensor with sensor lifetime of at least 500 million e/pix, sensor size of at least 4K x 4K (four thousand by four thousand) pixels and sensor read out of at least 1000 full frames per second or better.	7
2.2	Software for image acquisition, automated data collection and camera control should be in a single platform.	3
3	120 kV Cryo-TEM	
3.1	Accelerating voltage of 20 kV to 120 kV (variable either in steps or continuously).	5
3.2	Electron Source: W/LaB6 thermionic Gun.	2
3.3	Specimen chamber:	3
	Eucentric Goniometer fully motorized stage with all 4 axis (XYZ α) with accurate specimen position recall and retrieve facility.	
	Goniometer stage should accept variety of specimen holders including heating, cooling, and low background double tilt holder.	
	Specimen tilt angle at least ± 70 degree or more with standard single tilt holder / high tilting specimen holder.	
3.4	Bottom mounted CMOS Camera, sensor size at least 4K X 4K (four thousand by four thousand) pixels.	5
	Dynamic range with frame accumulation ≥ 16 (greater than or equal to sixteen) bit.	
	Camera Length for diffraction should be ≤ 50 mm (less than or equal to fifty millimeter) to ≥ 2000 mm (greater than or equal to two thousand millimeter).	
	Softwares for camera control.	
3.5	3D Tomography:	3
	Facility for 3D tomography and holders for 3D tomography, including hardware and relevant software's for automatic acquisition and montage of images in TEM mode of operation, along with 3D reconstruction.	
3.6	Cryo-holder:	3
	A cryo-holder compatible with the 120 kV TEM provided for holding single sample at cryo-temperatures for at least 8 (eight) hours. Another cryo-holder compatible with the 120 kV TEM provided for holding multiple samples at cryo-temperatures for at least 3-4 (three to four) hours. Compatible with single axis tilting of $\pm 70^\circ$ (seventy degree).	
4	Accessories: Glow-discharge unit, Carbon/metal coater and any other item Chiller, Compressor, UPS of adequate capacity etc. provided to ensure smooth and noiseless operation of all components.	7
	Separate unit should be provided for offline data analysis and High Speed storage appliance with capacity preferably of 600 TB or more.	

Qualification Requirements

The Bidder shall furnish documentary evidence along with Technical Bid to support the following Qualification Criteria:

The bidder shall furnish documentary evidence to demonstrate that the bidder satisfies the bidders' eligibility criteria,

Financial Qualifying Criteria: The Bidder shall furnish documentary evidence to meet the following Financial Qualifying Criteria:

a) An undertaking (self-certificate) is to be submitted that the Organization has not been blacklisted during last 3 years by any Central / State Government Department/Organization.

b) The Creditworthy report –

MIRA inform report of the OEM / Principal supplier for the Current Financial Year is to be enclosed along with the Technical Bid if the total price of the Equipment/System is more than Rs. 1 crore (Rs.10 million). The minimum rating for Financial Qualification is Rating-Ba. The Creditworthy Report may be obtained from:

**M/s. MIRA INFORM PRIVATE LIMITED,
605, Palmspring, Near D'Mart, Link Road,
Malad (West), Mumbai: 400 064; Tel Nos.: 022 – 40448000 (44 lines)
Fax No. 022-0448045 / 40448046;
E-mail: mira@mirainform.com; info@mirainform.com
Website: <http://www.mirainform.com> Note:**

The creditworthy report from other reputed and equivalent firms (**such as Dun & Bradstreet**) is also acceptable.

However, report should have been obtained after 1st April 2019.

4) The Bidder should be a manufacturer /authorized representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". The Manufacturers' Authorization Form Chapter-8: Annexure B must be enclosed with the technical bid.

5) Experience and Technical Capacity: The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s):

a) Equipment / System offered must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Bid Opening.

b) The bidder (OEM/Direct Distributor/Dealer) should have supplied and installed during past 3 years, at least two similar equipment's / systems as mentioned in Chapter-4. The Bidder should furnish the information on all past supplies and satisfactory performance during past 3 years in the Performance Statement Form. Bidders shall invariably furnish documentary evidence (Client's certificate) in support of the satisfactory operation of the equipment / system.

c) Details of Service Centres and information on service support facilities that would be provided after the warranty period.

d) That adequate and specialized expertise is already available or will be made available following the execution of the contract in the Purchaser's country, to ensure that the support services are responsive and adequate.

6) The Indian Agents of foreign manufacturers/ suppliers quoting directly on behalf of their principals for items appearing in the restricted list of the current EXIM policy of the Govt. of India

must be registered with DGS&D. 6) Either the Indian Agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. Further, to maintain sanctity of tendering system one Indian agent cannot represent two different foreign principals in one tender. The bidders who do not fulfil the above Eligibility, Financial and Technical Qualification Criteria shall be rejected during the Evaluation of Technical Bid.

CHAPTER-5 PRICE SCHEDULE

The Bill of materials must be included in the technical offer as well as commercial offer. **However the Technical offer should not contain any price information.**

ALL THE BIDDERS SHOULD QUOTE THEIR OFFER IN FOLLOWING FORMAT FOR UNIFORMITY

PRICE SCHEDULE FOR GOODS - FOREIGN CURRENCY

Name of the Bidder _____

Tender No. _____

1	2	3	4	5	6		7		8		9
SI No	Item Description	HSN Code	Unit	Qty	Unit Price		Total price (5x6)		Charges for Insurance & transportation to port/ place of destination		Total Price (7+8)
					FOB (named port of shipment)	FCA (named place of delivery)	FOB (named port of shipment)	FCA (named place of delivery)	Ocean	Air	CIF
1											
2											
3											

Total Bid price in foreign Currency _____ in words.

Signature of Bidder :

Name :

Business Address :

Note:

The Bidder may add rows as per requirement to include the prices of all Components/Parts, Warranties, Installation etc. whichever applicable.

- (a) Indian agents name & address _____
- (b) Installation, commissioning & training charges, if any_____
- (c) Cost of Spares _____
- (d) The Indian agent's commission shall paid in Indian Rupees only based on the Exchange Rate prevailing on the date of negotiation of documents.
- (e) The cost of optional items shall be indicated separately.

PRICE SCHEDULE FOR GOODS –INR

Name of the Bidder _____

Tender No. _____

1	2	3	4	5	6	7	8	9	10	11	12
Sl. No.	Item Description	Country of Origin	Qty	Unit	Ex-Works. Ex-Warehouse, Ex-show room off the shelf price (inclusive of tax already paid)	Total price	GST payable, if contract is awarded	Packing & forwarding up to station of dispatch, if any	Charges of inland transportation, insurance up to Institute	Installation, Commissioning & training charges, If any.	Gross Total(FOR)
						Ex-Works. Ex-Warehouse, Ex-show room off the shelf price (inclusive of tax already paid) 4x6					
1											
2											
3											

Total Bid price in _____ in words.

Signature of Bidder :

Name :

Note:

The cost of optional items shall be indicated separately.

The bidder may add rows to include the prices of all components & warranties, installation etc. whichever applicable.

(a)Cost of spares _____

(b)Warranty if being charged include in BoQ

FORMAT/QUESTIONNAIR FOR COMPLIANCE OF TERMS AND CONDITIONS

Tender No.: _____

Due Date _____

NOTE:

1. Quotation will not be considered without submission of this format.
2. If a particular question is not at all applicable please write NA in compliance part in Col. No. 4 below.
3. Kindly see the relevant terms & conditions of the tender document in each question before replying to the questions mentioned in Col. 2 below).

SNo	Terms & condition of Tender document	Whether acceptable (say ‘Yes’ or ‘No’ (preferably use different colour ink for ‘No’)	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
1	2	3	4
1	a.) Whether quotation is direct from Principal supplier/manufacturer or their own office in India (Please specify)		
	b) Whether quotation is being submitted by Indian Agent/authorized distributor/ dealer		
	c) Whether the agent is registered with NSIC/MSME		

SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
2	Whether techno-commercial Bid contains EMD, technical literature/leaflets, detailed specifications & commercial terms & conditions etc. as applicable.		
3	a) Whether the required Scanned copy of Tender Fee & EMD is being submitted with the quotation		
	b) Please specify the form of EMD whether in the form of DD/bank guarantee or TDR/FDR (Please mention No., date & amount of EMD documents.) or Bid Security Format at Annexure –'C'		
4	a. If the prices are on Ex-Works basis or FOB (names port of shipment) or FCA (named place of delivery abroad)		
	b. Whether specific amounts or percentage of expenses like packing, forwarding, handling, freight, insurance, documentation etc. have been mentioned in quotation separately in clear terms.		
5	a) Whether prevailing rates of sales tax, excise duty & other govt. levies (for indigenous supplies) have been given in quotation		

SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
6	Have you mentioned the validity period of the quotation as per our requirements		
7	a) Whether the Price reasonability Certificate is submitted with quotation		
	b) Whether copies of last two supply orders of the same item from other customers have been attached with the quotation		
8	Whether rates/amount of AMC after the warranty period is over has been mentioned		
9	Have you gone through the specification Clause & complied with the same		
10	Whether the Make/Brand, Model number and name of manufacturer has been mentioned in the quotation and Printed technical literature/ leaflets of quoted items have been submitted		
11	Whether compliance statement of specifications has been attached with the quotation.		
12	a) Whether the delivery period for supply of the items has been mentioned		

SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
	b) Whether mode of delivery & tentative size & weight of the consignment has also been indicated		
13	Do you agree to the submission of Performance Bank Guarantee and have you mentioned in your quotation about this.		
14	a) Do you agree with the payment terms for indigenous supplies?		No deviation permitted
	b) Do you agree with the payment terms for imports supplies?		
15	Do you agree about the date of commencement of warranty period & its extension is necessary.		
16	a) Who will install/commission and demonstrate the equipment at IISER Pune, FREE OF COST.		
	b) Will you be able to do it within a month		
17	Have you mentioned the guarantee/warranty period in your quotation and do you agree with guarantee clause?		
18	Spare parts		
19	After Sales service		

SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
20	a) Do you agree that on receipt of material in damaged condition or short supply you will replace the same on CIF basis, free of cost pending the settlement of the insurance claim?		
	b) Do you agree with the clause of physical inspection?		
21	Whether list of specific user's for the same item & model as quoted along-with performance certificates from the users is submitted with offer		
22	Whether you agree to the penalty clause for late delivery & installation?		
23	Whether training to our scientist/technical person will be given free of cost . If yes, have you specified in quotation whether it will be in our lab? Or at supplier's site in India or abroad.		
24	a) Whether all the pages have been page numbered?		
	b) Whether quotation has been signed and designation & name of signatory mentioned.		

FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS

S. N.	Name of specifications/ part / Accessories of tender enquiry	Specifications of quoted Model/ Item	Compliance Whether “YES” Or “NO”	Deviation, if any, to be indicated in unambiguous terms	Whether the compliance / deviation is clearly mentioned in technical leaflet/ literature
1	2	3	4	5	6

BID SECURITY FORM

Whereas (Hereinafter called “the tenderer”)
has submitted their offer dated for the supply of
(Hereinafter called “the tender”) against the purchaser’s tender enquiry No.

KNOW ALL MEN by these presents that WE (Name of
bank) of (Name of country), having our registered office at
..... (Address of bank) (Hereinafter
called the “Bank”), are bound unto (Name of
purchaser) (Hereinafter called “the purchaser”) in the sum of for which payment will
and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these
presents. Sealed with the Common Seal of the said Bank this day of..... 20.....

THE CONDITIONS OF THESE OBLIGATIONS ARE:

1. If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
2. If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity.
3. If the tenderer fails to furnish the Performance Security for the due Performance of the contract.
4. Fails or refuses to accept/execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchase will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

The guarantee shall remain in force up to and including forty five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature of the authorized officer of the Bank)

Name and Designation of the Officer
Seal, Name & Address of the Bank and
address of the branch

MANUFACTURER’S AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that re binding on the Manufacturer]

Date: [Insert date (as Day, month and year) of Bid submission]

Tender No.: [Insert number from Invitation for Bids]

To: [Insert complete name and address of Purchaser]

WHEREAS

We [insert completer name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer’s factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee and warranty in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____ [insert date of signing]

PREVIOUS SUPPLY ORDERS FORMAT

Name of the Firm _____

Order placed by {Full address of Purchaser}	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those quoted to us.	Has the equipment been installed satisfactorily?	Contact Person along with Telephone no., Fax no. and e- mail address.

Signature and Seal of the Manufacturer/ bidder

Place:

Date:

BIDDER INFORMATION FORM

Company Name : _____
Registration Number : _____
Registered Address : _____

Name of Partners /Director : _____

City : _____
Postal Code : _____
Company's Establishment Year : _____
Company's Nature of Business : _____

Company's Legal Status (tick on appropriate option)

- 1) Limited Company
- 2) Undertaking
- 3) Joint Venture
- 4) Partnership
- 5) Others

Company Category

- 1) Micro Unit as per MSME
- 2) Small Unit as per MSME
- 3) Medium Unit as per MSME
- 4) Ancillary Unit
- 5) SSI
- 6) Others

CONTACT DETAILS

Contact Name : _____
Email Id : _____
Designation : _____
Phone No : (_____) _____
Mobile No : _____

BANK DETAILS

Name of Beneficiary : _____
A/c. No. CC/CD/SB/OD: _____
Name of Bank : _____
IFSC NO. (Bank) : _____

Enclose scan copy of cancelled Cheque.

Branch Address and Branch Code: _____

Other Details

Vendor's PAN No. _____

Vendor's GST No: _____

CERTIFICATE
(to be provided on letter head of the firm)

I hereby certify that the above firm neither blacklisted by any Central/State Government/Public Undertaking/Institute nor is any criminal case registered / pending against the firm or its owner / partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

Annual Maintenance Contract

We hereby certify that the Annual Maintenance Contract for the equipment, after expiry of warranty period will be charged as follows:

For Comprehensive AMC

- 1) 1st year ____ % of the equipment value
- 2) 2nd year ____ % of the equipment value
- 3) 3rd year ____ % of the equipment value.

For Non - Comprehensive AMC

- 1) 1st year ____ % of the equipment value
- 2) 2nd year ____ % of the equipment value
- 3) 3rd year ____ % of the equipment value.

We also certify that the spares for the equipment will be available for the equipment for _____ years.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

PRE CONTRACT INTEGRITY PACT

The specimen of the Pre-Contract Integrity Pact which is part of tender documents is as follows:-

INTEGRITY PACT

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on ____ day of the month _____ 2017 between the Indian Institute of Science Education & Research, Dr. Homi Bhabha Road, Pune-411008 (herein after referred to as 'BUYER'), which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s _____ represented by Shri _____ Chief Executive Officer (hereinafter called the "BIDDER / Seller" , which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

Whereas the BUYER proposes to procure Supply, Installation & Commissioning of _____ and d the BIDDER / Seller is willing to offer / has offered the stores and

Whereas the BIDDER is a private company/public company/partnership/ registered export agency, constituted in accordance with the relevant law in the matter and

theBUYER is a Department of the Government of India under Ministry of Human Resources performing functions on behalf of the President of India.

Now, therefore,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption in any form by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Commitments of the BUYER

- 1.1 The BUYER undertakes that no official of the BUYER, connected directly or Indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage

from the BIDDER either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.

- 1.2 The BUYER will, during the pre-contract stage, treat all Bidders alike, and will provide to all Bidders the same information and will not provide any such information to any particular Bidder which could afford an advantage to that particular Bidder in comparison to other Bidders.
- 1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

In case any such preceding misconduct on the part of such official (s) is reported by the Bidder to the BUYER, with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

Commitments of BIDDER

2. The BIDDER commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:
 - 2.1 The BIDDER will not offer, directly or through intermediaries, any bribe, Consideration, gift, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
 - 2.2 The BIDDER further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the BUYER for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with respect to the BUYER's Organisation.
 - 2.3 BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
 - 2.4 BIDDERS shall disclose the payments to be made by them to agents/brokers on any other intermediary, in connection with this bid/contract.
 - 2.5 The BIDDERS further confirms and declares to the BUYER that the BIDDER is the original manufacturer/ integrator/ authorized Govt. sponsored Export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER, or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER; nor has any amount been paid, promised or intended to be paid to any such individual, firm or Company in respect of any such intercession, facilitation or recommendation.
 - 2.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or

intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

- 2.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 2.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 2.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details; including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 2.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 2.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 2.12 If the BIDDER or any employee of BIDDER on any person acting on behalf of BIDDER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financial interest / stake in the BIDDERS firm, the same shall be disclosed by the BIDDER at the time of filling of tender.

The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.

3. Previous Transgression

- 3.1 The BIDDER declares that no previous transgression occurred in the last three years - immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged herein or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDERS' exclusion from the tender process.
- 3.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

4. Earnest Money/Security Deposit

- 4.1 While submitting commercial bid, the BIDDER shall deposit an amount Rs.2,60,000/- (to be specified in RFP) as Earnest Money/ Security Deposit with the BUYER through any of the following instruments:
 - i. Bank Draft or a Pay Order in favour of the BUYER payable at location of/specified by the BUYER.
 - ii. A confirmed guarantee by an Indian Nationalized Bank, promising payment of the guaranteed sum to the BUYER, on demand within three working days without any demur whatsoever and without

seeking any reasons whatsoever. The demand for payment by the BUYER shall be treated as conclusive proof for payment.

- 4.2. The Earnest Money/Security Deposit shall be valid up to a period of five years or the complete conclusion of contractual obligations to complete satisfaction of both the BIDDER and the BUYER, including warranty period, whichever is later.
- 4.3 In the case of successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the Provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this pact.
- 4.4 No interest shall be payable by the BUYER to the BIDDER(s) on Earnest Money/ Security Deposit for the period of its currency.

5. Sanctions for Violation

Any breach of the aforesaid provisions by the BIDDER or any one employed by him or acting on his behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following action, wherever required:-

(i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However the proceedings with the other BIDDER(s) would continue.

(ii) The Earnest Money (in pre – contract stage and /or/ Security deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.

(iii) To immediately cancel the contract, if already signed without giving any compensation to the BIDDER.

(iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due by the BUYER to the BIDDER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

(v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest,

(vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money due to the BIDDER.

(vii) To debar the BIDDER from participating in future bidding process of the Government of India for a minimum period of five years, which may be further extended at the discretion of the BUYER.

(viii) To recover all sums paid in violation of this pact by the BIDDER(s) to any middleman or agent or broker with a view to securing the contract.

(ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.

(x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

5.1 The BUYER will be entitled to take or any of the actions mentioned at para 5.1 (i) to (x) of the Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code, 1860 or Prevention of Corruption Act 1988 or any other statute enacted for prevention of corruption.

5.2 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the independent Monitors appointed for the purpose of the Pact.

6. Fall Clause

6.1 The Bidder undertakes that he has not supplied/is not supplying the similar systems or subsystems at a price lower than that offered in the present bid in respect of any other Defence/ Public Sector Undertakings/Public sector undertakings/Ministry of Defence and if it is found at any stage that the similar system or sub-system was supplied by the BIDDER to any other Defence Public Sector Undertakings/Public Sector Undertaking/Ministry of Defence at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.

7. Independent External Monitor(s)

7.1 The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

7.2 The Monitor shall not be subject to instructions by the representatives of the parties and performs their functions neutrally and independently.

7.3 Both the parties accept that the Monitors have the right to access all the documents relating to the project / procurement, including minutes of meetings.

7.4 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the IISER.

7.5 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER(s) / Contractor(s) / Subcontractor(s) with confidentiality.

7.6 The BUYER will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the BUYER and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

7.7 The Monitor will submit a written report to the Director IISER, Pune within 8 to 10 weeks from the date of reference or intimation to him by the BUYER and BIDDER and should the occasion arise, submit proposals for correcting problematic situations.

8. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the



BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and Jurisdiction is Pune.

10. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings

11. Validity

11.1 The validity of this Integrity Pact shall be from date of its signing and extend up to 5 years or till the complete execution of the contract to the satisfaction of both the BIDDER and the BUYER, whichever is later.

11.2 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

12 The Parties hereby sign this Integrity Pact at _____ on _____

BUYER
Name of the Officer
Designation
IISER Pune

BIDDER

Witness

Witness

1. _____

1. _____

2 _____

2 _____

IMPORTANT NOTICE

TENDERERS RESPONDING TO THIS ENQUIRY SHALL BE DEEMED TO BE AGREEABLE TO THE TERMS AND CONDITIONS HEREIN CONTAINED. THESE TERMS AND CONDITIONS SHALL BE BINDING ON THE SUCCESSFUL TENDERER. CONDITIONAL TENDERS ARE LIABLE TO BE REJECTED. IISER PUNE WILL PROCESS THE TENDER AS PER IISER PUNE STANDARD PROCEDURES. THE DIRECTOR OF THE INSTITUTE RESERVES THE RIGHT TO REJECT ANY OR ALL OR PART OF TENDER WITHOUT ASSIGNING ANY REASON AND SHALL ALSO NOT BE BOUND TO ACCEPT THE LOWEST TENDER. IISER PUNE WOULD NOT BE UNDER ANY OBLIGATION TO GIVE ANY CLARIFICATIONS TO THE AGENCIES WHOSE BIDS ARE REJECTED.

I agree to all terms and conditions mentioned in the tender document of the Institute

Signature of the Tenderer

Checklist for BIDDERS

BIDDERS to indicate whether the following are enclosed/mentioned by striking out the non-relevant option

Envelope-1(Technical-Bid) (Following documents to be provided as single PDF file)			
Sl. No.	Content	File Types	Document Attached
1	Scan copies of both Tender Fee of Rs.1,180/- and EMD of Rs.52,00,000/-	.PDF	(Yes /No)
2	Format/Questionnaire for compliance as per Annexure- 'A'	.PDF	(Yes /No)
3	Format of compliance statement of specification as per Annexure-'B'	.PDF	(Yes /No)
4	Bid security Form as per Annexure-'C'(as applicable)	.PDF	(Yes /No)
5	Manufacturer's Authorization Form as per Annexure-'D'	.PDF	(Yes /No)
6	Previous Supply Order Format as per Annexure-'E'	.PDF	(Yes /No)
7	Bidder Information form as per Annexure-'F'	.PDF	(Yes /No)
8	Blacklist certificate as per Annexure-'G'	.PDF	(Yes /No)
9	Annual Maintenance Contract Annexure 'H'	.PDF	(Yes /No)
10	Pre Contract Integrity Pact Annexure 'I'	.PDF	(Yes /No)
11	A copy of the Un-priced Commercial bid	.PDF	(Yes /No)
12	List of deliverables as per Chapter- 4	.PDF	(Yes /No)
13	Solvency certificate for Rs 10,40,00,000/- (not older than twelve months) issued by scheduled/nationalized bank with which BIDDER holds the current account	.PDF	(Yes /No)
14	Undertaking that the successful BIDDER agrees to give a 10 % security deposit and Performance Bank Guarantee	.PDF	(Yes /No)
15	Self-Attested copy of GST Number (as applicable)	.PDF	(Yes /No)
16	Tender Terms & Conditions Acceptance signed with official seal is attached	.PDF	(Yes /No)
Envelope-2(Financial-Bid)			
Sl. No.	Content	File Types	Document Attached
1	Price bid should be submitted in PDF Format	.PDF & Excel	(Yes /No)