

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

Knowledge city, Sector 81, MOHALI - 140306

BID DOCUMENT PRESS TENDER (TWO BID)

Executive Director, NABI – Mohali invites tenders from reputed Indian/foreign manufacturers or their authorized agents for the supply of the following items to NABI under two bid systems:

Sn	Tender No	Item Description	Qty	EMD (in Rs.)
1	NABI/2(042)/18-19/N-PUR	ATOMIC FORCE MICROSCOPY	01	1,28,000.00

Note: SUPPLIERS WHO HAVE DOWNLOADED THE TENDER DOCUMENTS FROM THE WEBSITE, ARE REQUIRED TO ATTACH DEMAND DRAFT/PAY ORDER FOR Rs.1770/- (ONE THOUSAND SEVEN HUNDRED AND SEVENTY ONLY) FAVOURING NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE, MOHALI, BEING THE COST OF TENDER DOCUMENTS, FAILING WHICH THE TENDER WILL NOT BE CONSIDERED.

Details of Demand Draft/Pay Order

 Demand Draft/Pay Order for Rs.1770/- (Rupees One thousand seven hundred and seventy only) drawn on______ is enclosed with technical bid towards the cost of tender documents

2. Demand Draft/Pay Order for Rs._____(Rupees_____

drawn on

_____is enclosed with technical bid of the tender documents towards Earnest Money Deposit (EMD)

The detailed Tender Documents with complete terms & conditions with technical specifications are available on our website <u>http://www.nabi.res.in</u> & eprcoure.gov.in

Last date of receipt of complete tenders is 19th June 2018 at 3.00 PM (IST)

The date of opening of technical bids is 19th June 2018 at 4.00 PM onwards.

Hard Copy of the Bid to be submitted to:

Stores & Purchase Officer NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE Knowledge City, Sector 81, Mohali - 140306

Ph: +91-172-5221109/300 **Fax:** +91-172-5221100

E-Mail: purchase@nabi.res.in

Website: http://www.nabi.res.in



NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

Knowledge City, Sector 81, MOHALI - 140306

Open Tender Notice No: NABI/2(042)/18-19/N-PUR

Executive Director, NABI invites tenders (Two Bid System) in closed/sealed covers with wax/cello tape/ company seal from the reputed Indian/foreign manufacturers or sole authorized dealers/distributors for the supply of the following item(s):

	Sno	Tender No	Tender No Item Description		EMD (in Rs.)
E	1	NABI/2(042)/18-19/N-PUR	ATOMIC FORCE MICROSCOPY	01	1,28,000.00

• PLEASE REFER TO THE DETAILED SPECIFICATION FOR THE RESPECTIVE ITEM AT THE END OF THIS TENDER DOCUMENT (CH.XIV).

• EACH ITEM HAS TO BE QUOTED SEPARATELY.

Interested parties may purchase the tender document directly from the office of NABI by paying Rs.1770/- or download the tender documents directly from the website and attach a DD of Rs.1770/- (One thousand seven hundred and seventy only) in favour of National Agri-Food Biotechnology Institute as cost of tender documents. Both the bids i.e. the Technical & Price bids must be submitted on or before 19th June 2018 @ 1500 hrs along with EMD.

IMPORTANT NOTE, DATES & TIME				
Date and Time of Prebid Conference	30 th May 2018 (1600 HRS)			
Last Date & Time For Submission	19 th June 2018 (1500 HRS)			
Date / Time of Opening of Bids	19 th June 2018 (1600 HRS)			
Venue of Bid Opening at NABI	STORES AND PURCHASE SECTION, NABI CAMPUS			
Tenders to be submitted at	National Agri-Food Biotechnology Institute Knowledge City, Sector 81, Mohali – 140306			

Most Important

Pre-Bid Conference (PBC)

- The objective of PBC is to provide a platform for clarifying issues and clearing doubts, if any, about the specification and other allied technical/commercial details of the bid document. Bids should be submitted only after the PBC so as to take care of the change made in the bidding document.
- The prospective participants should inform their intention to participate and send written queries at the email purchase@nabi.res.in positively up to 26th May 2018 to enable us to keep the response ready.
- Change in the technical specifications and terms & conditions if any, for the above item after pre-bid, will be posted on the NABI website. All vendors are requested to quote accordingly.

IMPORTANT NOTE:

• PLEASE STRICTLY ADHERE TO THE DATES / TIMES MENTIONED IN THIS DOCUMENT

• PLEASE FILL & ENCLOSE THE BRIEF SUMMARY OF QUOTATION & CHECKLIST AS PROVIDED AT THE END OF THIS CHAPTER & ENCLOSE WITH YOUR BID (WITH PRICE BID IN CASE OF TWO BID SYSTEM)

The **bids** (Technical Bids in case of Two Bid Tenders) will be **opened** in the presence of representatives of tenderers, if any. **If any unscheduled holiday occurs on the date of submission/opening, then next working day shall be the prescribed date of submission/opening. Requests for postponement will not be entertained.** Fax/email bids may not be accepted. Late/Delayed tenders shall not be opened. Please send your bids to the **Stores & Purchase Officer** at the address mentioned above.

NABI reserves the right to accept/reject any offer in part or full without assigning any reason.

SUMMARY OF QUOTATION & CHECKLIST (Enclose with Price Bid)

(Information provided in this sheet shall not to be used for evaluation/comparison purpose) FOR Rs. QUOTE FILL RELEVANT INFORMATION IN Rs.

(Please Fill It Up. DON'T Write 'AS PER QUOTATION' / 'PLEASE REFER TO OUR OFFER' etc.)

Qu	otation Ref. No.			Date	
01	Name of the Item (Equipm	ent / System etc.)			
02	Main Item Model NUMBER	R			
03	Total FCA/FOB Value Of T (Inclusive of Indian Agency				
04	Insurance & Airfreight Cha				
05	CIF / CIP Value Of The Pa	ickage			
06	Customs Clearance Char AAI Charges Transportat Mohali & other clearance Concessional Customs of by NABI	tion from New Delhi charges) – No Dev	Airport to NABI, iation.		
07	Payment Terms (Conditional Payment Terms		ed)		
08	Delivery Time (Weeks/Mor	nths)			
09	Warranty (Months/Years)				
10	Validity of Quotation (Days	/Months)			
11	Product Import Code [*] (IT((Please consult any Export)				
12	Country of Origin (product))			
13	Port(s) of Shipment				
14	Approx. Shipment Wt. (Ch	argeable Wt.) of the	Item (kg)		
15	Approx. Dimensions (LXB)	XW)/ Vol. of The Pac	ked Consignment		
Cł	IECKLIST		CHECKLIST		CHECKLIST

01	Following Things Are Mentioned On The Main (Outer) Envelope •Item Name •NABI Reference No. •Last Date For Submission Of Tender •Date Of Opening Of Tender •Firm's Name & Address	
02	EMD is Enclosed (with Technical Bid Envelope In Case Of Two Bid)	
03	Demand Draft/TDR is in favour Of National Agri-Food Biotechnology Institute, and Payable At Mohali(If Applicable) Bidding Firm's Name / Our Ref. No. etc. has been mentioned on the back side of Demand Draft	
04	Prices have been quoted keeping in view clauses C8, C13, C23 of Chapter II (ITB) and SCC clauses 3,7,8, and 9 of Chapter IV	
05	The Bid Papers Have Been PUNCHED With A Hole O On The Top Left Hand Corner Side And Properly Tagged .	
06	Only <u>Relevant</u> Documents (Technical Brochures/Leaflets Etc.) Required In Support Of The Quoted Item Have Been Enclosed. No Irrelevant Papers like ITCC, User Recommendations, and Order Copies etc. Have Been Enclosed Unless Specifically Asked For	
07	Quotation Have Been Duly Signed And Stamped By the Authorized & Competent Person. All Cuttings/Over Writings Have Been Duly Checked, Initialled And Stamped. (If Applicable)	
08	In Case of Two Bid, Single Combined Quote Has Not Been Submitted OR 'Price Bid' Has Not Been Enclosed In The Envelope Marked 'Technical Bid'	
09	In Case of Two Bid Tender This Page Will Be Enclosed With The Price Bid	

We have read, understood and accepted the tender terms and conditions. The undersigned is competent to sign the tender document including this page on behalf of the quoting firm.

(Signature with Seal)

CHAPTER - II: INSTRUCTION TO BIDDERS

A. INTRODUCTION

1 Eligible Bidders

- 1.1 This Invitation for Bids is open to all manufacturers or their dealers specifically <u>authorised by the manufacturers</u> (see Chapter VII of this document) to quote on their behalf for this tender and Indian agents of foreign principals, if any.
- 1.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids.

2 Cost of Bidding

2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. THE BIDDING DOCUMENTS

3 Cost of Bid Document

3.1 The complete bid document may be purchased directly from the office by paying `1770/- or download the tender documents directly from the NABI website <u>http://www.nabi.res.in</u> and attach a DD of `1770/- (One thousand seven hundred and seventy only) in favour of National Agri-Food Biotechnology Institute as cost of the tender documents.

4 Contents of Bid Document

4.1 The goods required, bidding procedures and contract terms are prescribed in **this** Bid Document which includes the following:

S. No.	Title	Chapter No.
01	Notice Inviting Tender (NIT)	I
02	Instructions to Bidder (ITB)	II
03	General Conditions of Contract (GCC)	III
04	Special Conditions of Contract (SCC)	IV
05	Bid Form	V
06	Bid Security Form	VI
07	Manufacturer's Authorisation Form	VII
08	Bidder's Performance Statement Form	VIII
09	Service Support Details	IX
10	Deviation Statement Form (ITB/GCC/SCC)	X
11	Technical Compliance Statement Form	XI
12	Performance Security Form	XII
13	Qualification Requirements	XIII
14	Technical Specifications & Other Important Requirements	XIV
15	Price Reasonability Certificate	XV

4.2 The Bidder is expected to examine all instructions, forms, terms (ITB/GCC/SCC etc.), and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive shall result in rejection of the bid.

5 Amendment To Bid Document

- 5.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative modify the Bid Document by amendment. Such amendments shall form an integral part of bid documents and it shall amount to an amendment of relevant clauses of the Bid Document.
- 5.2 The prospective bidders are **required** to keep a watch on the NABI website for any amendment to the tender document till 10 (ten) days prior to the opening of the tender. The Purchaser reserves the right to reject the bids if the bids are submitted without taking into account these amendments/clarifications. Further bidder will be fully responsible for downloading of the tender document and amendments thereto if any for their completeness.
- 5.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may also extend the deadline for the submission of bids.

C. PREPARATION OF BIDS

6 Language of Bid

6.1 The Bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser shall be written in English language, provided that any printed literature furnished by the bidder may be written in another language but it is to be accompanied by an English translation of its pertinent passage(s) duly signed and verified as true English translation. The responsibility for the correctness of the translation will be solely and completely on the bidder and NABI shall not be responsible for any loss/likely loss due to error in translation whatsoever. In such cases, for the purpose of interpretation of the bid, the English translation shall only govern.

7 Documents Comprising the Bid

- The bid is required to be submitted in **TWO PARTS**. One part is the <u>Techno-Commercial Unpriced Bid</u> and the other part is the <u>Financial / Price Bid</u>.
- 7.1 The Techno-Commercial Unpriced Bid prepared by the Bidder shall include the following without indicating the price in the Bid Form.
 - (i) Bid Security/EMD As Specified In the Invitation to Bids (ITB)
 - (ii) Service Support Details Form
 - (iii) T&C Deviation Statement Form
 - (iv) Technical Specification Compliance Form
 - (v) Performance Statement Form
 - (vi) Manufacturer's Authorization Form
 - (vii) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted as per qualification requirements/criteria
 - (viii) Bid Form
 - (ix) The Comprehensive Annual Maintenance Contract (CAMC) terms & conditions detailing the exclusions, if any and the estimated life of the equipment offered.
 - (x) If demonstration of the goods is deemed essential to ascertain conformity with the tendered specifications, then confirmation reflecting willingness to arrange demonstration of the equipment offered free of charge at NABI or any other location on a mutually agreeable date, prior to opening of priced bid.
 - (xi) Pre-installation requirements should be mentioned with the technical bid.
- 7.2 The <u>Price/Financial Bid</u> shall comprise the Techno Commercial Bid with price indicated and the format of BRIEF SUMMARY OF QUOTATION & CHECKLIST included at the beginning of this document.

8 Bid Prices

- 8.1 The Bidder shall indicate the unit prices and total bid prices of the goods it proposes to supply under the order and enclose it with the priced bid. NABI is a public funded scientific R&D institution (Academic). Please consider quoting special <u>prices</u> <u>applicable to academic institutions</u> as per your company policies.
- 8.2 Prices indicated shall be entered separately in the following manner (For Indigenous Items):
 - (i) The price of the goods, quoted (ex-works, ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, as applicable), including all duties and sales and other taxes already paid or payable
 - (ii) Taxes: NABI is exempted from payment of Excise Duty under notification number 10/97 dated 01.03.1997 and Customs Duty under notification No.51/96 dated 23.07.1996. Hence Excise Duty and Customs Duty, if any, should be shown separately. Please mention the applicable taxes (VAT/Service Tax etc.) clearly. We don't issue any 'Form C' or 'Form D'. If there is no explicit mention of taxes in your offer then quoted price will be *deemed inclusive* of such taxes. No other charges except those mentioned clearly in the quotation will be paid.

Further to the above, the GST Rates / Exemption applicable will be as per GOI, MoF Notification No. 47/2017-Integrated Tax (Rate) dt. 14/11/2017 & GOI - GST Law 2017 as applicable. The Custom duty Rates / Exemption will be as applicable as per Govt. of India Rules as applicable to DSIR Registered institute/Govt. funded research institute. It is certified that National Agri-Food Biotechnology Institute is an Autonomous Institute of the Department of Biotechnology, Ministry of Science & Technology, Govt. of India and it is registered with the (DSIR) Department of Scientific & Industrial Research, Government of India vide their Registration No. TUV/RG-CDE(1129)/2016 dated 24th Aug 2016, Valid up to 31.08.2021. It is also certified that the material/goods purchased for the institute is required for Research Programme in NABI & used for conducting/support RESEARCH PURPOSE only.

(iii) <u>Rates should be quoted FOR at NABI, Mohali inclusive of packing, forwarding, installation and commissioning charges etc. If ex-works prices are quoted then packing, forwarding, documentation, freight and insurance charges must be clearly mentioned separately. 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. Where there is no mention of packing, forwarding, freight, insurance charges, such offers shall be summarily rejected as incomplete.</u>

8.3 Prices indicated shall be entered separately in the following manner (For Imported Items):

- (i) The price of the goods, quoted FOB/FCA port of shipment. Notwithstanding financial obligations under INCOTERMS 2000 FCA, all charges such as Export Packing, Loading Charges, Inland Freight, Warehousing and Export Clearance etc. in the shipper country will have to be paid by the Supplier to the foreign associate of our duly appointed freight forwarding agent. Items as per the purchase order duly cleared for export in shipping country would be required to be handed over to our nominated freight forwarder.
- (ii) CIF/CIP rates for shipping items upto Mohali (India) preferably through AIR INDIA should also be mentioned. If facility of Air-India is not available in your country, specific intimation to this effect should be mentioned in your proforma invoice. Items are to be Packed, Marked & Labeled as per international norms. Small individual boxes must be palletized for easy handling & movement. Therefore state packing/ forwarding/ documentation charges etc. (each one) separately, if applicable. Order shall normally be placed on FOB/FCA basis but Executive Director NABI reserves the right to place the order on CIF/CIP basis also.

8.4 Prices quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non - responsive and rejected.

9 Bid Currencies

9.1 Prices shall be quoted in Indian Rupees (INR) or in freely convertible foreign currency preferably in USD (\$), Euro (€), Yen (¥), GBP (£) wherever possible for correct evaluation during comparison.

10 Documents Establishing Bidder's Eligibility and Qualifications

- 10.1 Pursuant to ITB 7, the bidder shall furnish, as part of its bid, documents establishing the bidders' eligibility to bid and its qualification to perform the contract if its bid is accepted
- 10.2 That the bidder meets the Qualification Requirements listed in Chapter XIII and elsewhere in this document.
- 10.3 BIDDER IS TO INFORM IF ANY SPECIAL CERTIFICATE OR DECLARATION REQUIRED W.R.T THE END USE OF THE ITEM OR FOR SPARES IN COMPLIANCE TO THE SUPPLIER COUNTRY OR SUPPLIER'S OWN REQUIREMENTS TO EXECUTE THE PURCHASE ORDER. FORMAT TO BE ENCLOSED WITH THE TECHNICAL BID. PURCHASER MAY AT ITS DISCRETION DISQUALIFY THE BIDDER AT THIS STAGE NOTWITHSTANDING THE BID MEETING ALL OTHER CRITERIA.

11 Documents Establishing Goods' Eligibility and Conformity to Bid Document

- 11.1 The documentary evidence of the goods and services eligibility shall consist of a statement on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.
- 11.2 Specifications are basic essence of the product. It must be ensured that the offers are strictly as per our specifications. At the same time it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. The documentary evidence of conformity of the goods and services to the Bid Document may be in the form of literature, drawings and data, and shall consist of:
 - (i) A detailed description of the essential technical and performance characteristics of the goods;
 - (ii) A list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two years, following commencement of the use of the goods by the Purchaser; and
 - (iii) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- 11.3 For purposes of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications. Technically unsuitable offers, offers not confirming to tender schedule shall be rejected.

12 Bid Security/EMD

- 12.1The Bidder shall furnish, as part of its bid, a bid security for an amount as specified in the Invitation for Bids/NIT. The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture.
 12.2The bid security shall be in Indian Rupees:
 - (i) A bank guarantee issued by a Nationalized /Scheduled bank, in the form provided in the Bid Document (Chapter VI) and valid for 45 days beyond the validity of the bid; or
 - (ii) A Banker's cheque/demand draft or TDR in favour of the purchaser.
- 12.3 Any bid not secured in accordance with Clauses 12.1 and 12.2 above will be rejected by the Purchaser as *non-responsive*. However for bidders with MSEs and Udyog Aadhar Memorandum (UAM), Bid Security/EMD and tender fee will be free of cost subject the terms and conditions mentioned in the ITB clause ref. no: 33 (page ref. no:9)
- 12.4Unsuccessful bidder's bid security will be discharged/returned as promptly as possible but not later than 15 days after the expiration of the period of bid validity or placement of order whichever is later.
- 12.5 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security.

12.6 The bid security may be forfeited:

-) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
- (ii) In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 21 days the order and/or fails to furnish Performance Security in the prescribed format.

13 Period of Validity of Bids

- 13.1 Bids must remain valid for at least **90 days** after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.
- 13.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable, telex, fax or e mail). The bid security provided under Clause 12 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.
- 13.3Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

14 Format and Signing of Bid

- 14.1 The Bidder shall submit the bids in two separate envelops. One envelop shall contain Techno commercial un-priced bid and the other shall contain the priced bid.
- 14.2The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialled by the person or persons signing the bid.
- 14.3 Any interlineations, erasures or overwriting shall be valid only if the persons or persons signing the bid initial them.

14.4 The Bidder shall furnish information on commissions or gratuities, if any paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract as per the bid form.

D. SUBMISSION OF BIDS

15 Sealing and Marking of Bids

- 15.1 The bidder shall seal the **Techno Commercial Unpriced Bid** and the **Price/Financial Bid** in two separate envelops duly marked as "Techno Commercial Unpriced Bid" and "Price/Financial Bid" respectively. Both the envelopes shall then be sealed in one outer (main) envelope.
- 15.2 The inner and outer envelopes shall:
 - (i) Be addressed to the Purchaser at the following address:

The Stores & Purchase Officer National Agri-Food Biotechnology Institute Knowledge City, Sector 81, Mohali – 140306.

- (ii) Bear the Item Name /Reference No. / Last Date For Submission Of Tender / Date Of Opening Of Tender / Firm's Name & Address and a statement "Do not open before Time hrs (IST) on Date." As per the NIT details.
- 15.3 If the outer envelope is not sealed and marked as required Clause 15.2, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.
- 15.4 Telex, Cable, Fax or e-mail bids will be rejected.

16 Deadline for Submission of Bids

- 16.1 Bids must be received by the Purchaser at the address specified under Clause 15.2 no later than the time and date specified in the NIT. In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received upto the appointed time on the next working day.
- 16.2The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with Clause 5, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

17 Late Bids

17.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to Clause 16, will be rejected and/or returned to the Bidder.

18 Modification and Withdrawal of Bids

- 18.1 The Bidder may modify or withdraw its bid after the bid's submission; provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.
- 18.2The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of Clause 15. A withdrawal notice may also be sent by telex or cable or fax or e mail but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.
- 18.3No bid may be modified subsequent to the deadline for submission of bids.
- 18.4No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to Clause 12.6.

E. OPENING AND EVALUATION OF BIDS

19 Opening of Bids by the Purchaser

- 19.1 The Purchaser will open bids (Techno Commercial Unpriced Bids in case of Two Bids), in the presence of Bidders' representatives who choose to attend, as per the schedule given in invitation to bids.
- 19.2The Bidders' representatives who are present shall sign the quotation opening sheet evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.
- 19.3The bidders' names, bid modifications or withdrawals, specifications, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bid.
- 19.4Bids (and modifications sent pursuant to Clause 18.1) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.
- 19.5 *If in response to our TWO BID enquiry, a single combined bid is submitted, it will be rejected straightway.* Similarly if 'PRICE BID' has been found enclosed in the envelope marked 'TECHNICAL BID' the same shall also be rejected summarily.
- 19.6 <u>The bids of all the parties whose price bid is not in a separate sealed cover shall be rejected</u>. The price quoted for the tender shall be mentioned only in the price bid.

20 Clarification of Bids

20.1To assist in the examination, evaluation and comparison of bids, the Purchaser may, at its discretion ask the bidder for any clarification(s) of its bid. The request for clarification and the response shall be in writing and no change in the price substance of the bid shall be sought, offered or permitted. However no post Bid clarifications at the initiative of the Bidder shall be entertained.

21 Preliminary Examination

21.1 The Purchaser will examine the bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from suppliers, without proper Authorization from the manufacturers and from Indian agents without DGS&D Registration Certificate in case the

items fall under the restricted list of the current EXIM/Foreign Trade Policy shall be treated as non-responsive and rejected summarily.

- 21.2 Arithmetical errors in the priced bids will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of errors, its bid will be rejected. If there is a discrepancy between the price quoted in words and figures, whichever is the higher of the two shall be taken as the bid price for comparison.
- 21.3 The Purchaser may waive any minor informality/deviation in specifications, non-conformity, or irregularity in a bid, which does not constitute a material deviation, provided such a waiver, does not prejudice or affect the relative ranking of any Bidder.
- 21.4 Prior to the detailed evaluation, the Purchaser will determine the *substantial responsiveness* of each bid to the Bid Document. For purposes of these Clauses, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bid Document without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Bid Security/ Performance Security, Warranty, Force Majeure, Applicable Law and Taxes & Duties will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 21.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- 21.6After downloading, the language of standard clauses etc. mentioned in this 'Bid Document' should not be tempered with/ changed/modified in any manner whatsoever. If any such modification etc. comes to our knowledge at any stage, the bid shall be rejected immediately and EMD shall also be forfeited.

22 Conversion to Single Currency

22.1 To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to Indian Rupees at the selling exchange rate established by RBI or any nationalized bank in India as notified in the Newspapers/banks' website on the date of Price/Financial Bid opening.

23 Evaluation & Comparison Of Bids

23.1 For the bids surviving the technical evaluation which have been found to be responsive the evaluation & comparison shall be made as under:

(i) Indigenous Offers

The final landing cost of purchase after all discounts, freight, forwarding, insurance, taxes etc. shall be the basis of evaluation.

(ii) Imported Offers

The FOB/FCA/CIP/CIF price shall be the basis of evaluation.

(iii) Imported Vs. Indigenous Offers

The final landing cost of purchase taking into account, freight, forwarding, insurance, taxes etc, customs clearance charges, Bank/LC charges, transportation upto NABI as per available records with NABI for imported goods shall be the basis of evaluation

- 23.2 Conditional tenders/discounts etc. shall not be accepted. Rates quoted without attached conditions (viz. Discounts having linkages to quantity, payment terms etc.) will only be considered for evaluation purpose. Thus conditional discounted rates linked to quantities and prompt/advance payment etc, will be ignored for determining *inter-se* position. The Purchaser however reserves the right to use the discounted rate/rates considered workable and appropriate for counter offer to the successful tenderers.
- 23.3Where there is no mention of packing, forwarding, freight, insurance charges, taxes etc. such offers shall be rejected as incomplete. *Therefore quotations showing only Ex-Works (EXW) prices shall be rejected summarily.*

24 Contacting the Purchaser

- 24.1 Subject to TB Clause 20, no Bidder shall contact or attempt to contact the Purchaser or anyone related to the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Purchaser, it should do so in writing.
- 24.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

25 Post Qualification

- 25.1 In the absence of pre-qualification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clauses10 & 11.
- 25.2 The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuance to ITB Clauses 10 & 11, as well as such other information as the Purchaser deems necessary and appropriate.
- 25.3An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

26 Award Criteria

26.1 Subject to ITB Clause 28, the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

27 Purchaser's Right To Vary Quantities At Time Of Award

27.1 The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

28 Purchaser's Right To Accept Any Bid And To Reject Any Or All Bids

28.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

29 Notification of Award

29.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex or fax or e mail that the bid has been accepted by way of a Purchase Order.

29.2 Upon the successful Bidder's furnishing of performance security pursuant to ITB Clause 30, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to Clause 12.

30 Performance Security

- 30.1 Within 21 days of the receipt of notification of award/purchase order from the Purchaser, the successful Bidder shall furnish the performance security (10% of the order value unless mentioned otherwise) in the Performance Security Form provided in the Bid Document.
- 30.2 Failure of the successful bidder to accept the order shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security and call for new bids.

31 Order Acceptance

31.1 The successful bidder should submit acceptance of the Purchase Order immediately but not later than 21 days in any case from the date of issue of the Purchase Order failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 12. 6 of ITB.

32 Buy Back Items

32.1 If the goods are to be quoted on 'Buy Back' basis, then bidders must offer a separate buy back price for the old item. The Purchaser reserves the right to place the order with or without 'buy back' option. If required the condition of old buy back goods may be examined by the bidder before submission of its bid.

33 MSE Guidelines

Registration of Micro, Small and Medium Enterprises for two types of Companies:

<u>Manufacturing Entity</u>: -- The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) Act, 1951). The Manufacturing Enterprise are defined in terms of investment in Plant & Machinery.

<u>Service Entity</u> :-- The enterprises engaged in providing or rendering of services and are defined in terms of investment in equipment.

		Manufacturing Enterprises	Service Industry
	Types of	(Investment in Plant and	(Investment In Plant and
No	Enterprise	Machinery)	Machinery)
			Does not exceed Rs.10
1	Micro	Does not exceed Rs.25 Lakh	Lakh
			Exceeds Rs.10 Lakh but
		Exceeds Rs.25 Lakh but does not	does not exceed Rs.2
2	Small	exceed Rs.5 Crore	Crore
			Exceeds Rs.2 Crore but
		Exceeds Rs.5 Crore but does not	does not exceed Rs.5
3	Medium	exceed Rs.10 Crore	Crore

Presently EMD/Tender Fee exemptions and price preference are applicable to only Micro and Small Industries. View above, if you are claiming EMD/Tender Fee exemptions, you should meet above criteria for Micro and Small Industries.

- 1 You have to submit your supporting documents issued by competent Govt bodies to become eligible for the above exemption.
- 2 <u>The quoting MSME's firm should attach a copy of UAM No. along with the technical bid failing with the bidders will not be able to enjoy the benefits as per the public procurement policy for MSE's order, 2012.</u>
- 3 Also your certificate (NSIC) / MSE shall cover the items tendered to get EMD/Tender fee exemptions.
- 4 NSIC certificate shall be valid as on due date / extended due date of the tender.
- 5 In case the bid is submitted as an Indian arm of a foreign bidder and the eligibility criteria conditions were met thru foreign company, then the EMD Exemption can not be claimed under the MSME status of Indian arm / subsidiary.

Thus a Bidder who solely on it's own, fulfills each eligibility criteria condition as per the tender terms and conditions and who are having MSE status, can claim EMD exemption/ tender fee.

If all these conditions are not fulfilled or supporting documents are not submitted with the Bid , then all those Bids without Tender fees /EMD will be summarily rejected and no queries will be entertained.

CHAPTER - III: GENERAL CONDITIONS OF CONTRACT (GCC)

1 Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
 - (*i*) "The Order" means the Purchase Order placed by the Purchaser including all the attachments and appendices thereto and all documents incorporated by reference therein;
 - (ii) "The Contract Price" means the price payable to the Supplier under the Order for the full and proper performance of its contractual obligations;
 - (iii) "The Goods" means all the equipment, machinery, and/or other materials, which the Supplier is required to supply to the Purchaser under the Contract;
 - (iv) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;
 - (v) "GCC" mean the General Conditions of Contract contained in this section.
 - (vi) "SCC" means the Special Conditions of Contract.
 - (vii) "The Purchaser" as specified in Special Conditions of Contract.
 - (viii) "The Purchaser's country is "India".
 - (ix) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
 - (x) "Day" means calendar day.

2 Application

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3 Standards

3.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

4 Use of Contract Documents and Information

- 4.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance. The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 4.1 except for purposes of performing the Contract.
- 4.2 Any document, other than the Contract itself, enumerated in GCC Clause 4.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.
- 4.3 The purchaser may be under obligation to make any document / information submitted by the bidder in response to this bid public if required under the provision of Indian Right to Information Act 2005. Therefore, bidder may explicitly indicate if any document / information in his tender include information of commercial confidence, trade secrets or intellectual property, the disclosure of which would jeopardize the competitive position of the bidder.

5 Patent Rights

5.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6 Submission of the bids

- 6.1 All bids complete in every respect must reach this office within the last date and time of receipt of bid. No extension shall be allowed for any reason whatsoever. Late tenders, Tenders received without Bid security/Earnest Money, cost of bidding documents, if applicable etc. shall be rejected summarily.
- 6.2 Tender documents are available free of cost or for sale as per the information specified in NIT. Interested bidders may purchase the tender documents on payment of the cost there of or download directly from our website. The Purchaser is not liable for either non-receipt of the tender document or for late receipt of the tender documents.

7 Performance Security

- 7.1 Within 21 days of receipt of the notification of contract award/purchase order, the Supplier shall furnish performance security for the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 7.3 The Performance Security shall be submitted in one of the following forms:
 - (i) Indian manufacturers/suppliers or Authorized Indian Agents of the Foreign Principals can submit the performance security on behalf of their foreign principals in the form of Bank Guarantee issued by a Nationalized/Scheduled bank located in India on the format provided in the bidding documents. **Or**
 - (ii) Foreign Principals can also submit performance security directly on the prescribed format through any foreign or Indian bank having office preferably in Chandigarh/Mohali(India) or in the form of Standby Letter of Credit which must be advised and confirmed by any bank in India located preferably in Chandigarh/Mohali (India).
- 7.4 The performance security/Standby LC will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC.
- 7.5 In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security/SLC, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

8 Inspections and Tests

- 8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications *at no extra cost* to the Purchaser. SCC and / or Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.
- 8.3 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- 8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Purchaser's Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9 Packing

- 9.1 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 specialized handling facilities at all points in transit.
- 9.2 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.
- 9.3 The purchaser reserves the rights to arrange to carry out packing and value inspections through their freight forwarding agents particularly in case of high value and sensitive items.

10 Delivery and Documents

10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the order within the period as indicated in the SCC. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

11 Insurance

11.1 Wherever required, the Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

12 Transportation

12.1 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.

13 Incidental Services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, specified in SCC, if any:
 - (i) Performance or supervision of the on-site assembly and/or start-up of the supplied Goods;
 - (ii) Furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (iii) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
 - (iv) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (v) Training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

14 Spare Parts

- 14.1As specified in the SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
 - (i) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
 - (ii) In the event of termination of production of the spare parts:
 - (iii) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (iv) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.
- 14.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

15 Warranty

15.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination. The warranty should be comprehensive and on site.

- 15.2This warranty shall remain valid for <u>12 months</u> from the date of actual and satisfactory installation of the equipment, unless specified otherwise in the SCC or along with specifications.
- 15.3The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately within in 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

16 Payment

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.
- 16.2The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfilment of other obligations stipulated in the contract.
- 16.3Payments shall be made promptly by the Purchaser normally within sixty days after submission of the invoice or claim by the Supplier.
- 16.4 Payment shall be made in currency as indicated in the order.

17 Prices

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

18 Change Orders

- 18.1 The Purchaser may at any time, by written notice given to the Supplier pursuant to GCC Clause 30, make changes within the general scope of the Contract in any one or more of the following:
 - (i) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - (ii) The method of shipping or packing;
 - (iii) The place of delivery; and/or
 - (iv) The Services to be provided by the Supplier.
 - (v) The delivery schedule.
- 18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within fifteen (15) days from the date of the Supplier's receipt of the Purchaser's change order.

19 Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20 Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

21 Subcontracts

- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.
- 21.2 Sub-contract shall be only for bought-out items and sub-assemblies.

22 Delays in the Supplier's Performance

- 22.1 Since time is the essence of the contract, delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in the Contract.
- 22.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s).
- 22.3As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without penalty, in which case the extension shall be ratified by the parties by amendment of the Contract.
- 22.4Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalty clause.

23 Penalty

23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.

24 Termination for Default

- 24.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:
 - (i) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
 - (ii) If the Supplier fails to perform any other obligation(s) under the Contract.
 - (iii) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

24.2 For the purpose of this Clause:

- (i) "*Corrupt practice*" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- (ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;"
- 24.3 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25 Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22, 23 and 24, the Supplier shall not be liable for forfeiture of its performance security, 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.
- 25.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26 Termination for Insolvency

26.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

27 Resolution of Disputes

- 27.1 The Purchaser 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.
- 27.2 If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the SCC. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.

28 Governing Language

28.1 The contract shall be written in English language. Subject to GCC Clause 30, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

29 Applicable Law

29.1 The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in SCC.

30 Notices

- 30.1 Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address specified in the SCC.
- 30.2A notice shall be effective when delivered or on the notice's effective date, whichever is later.

31 Taxes and Duties

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

CHAPTER - IV: SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses.

1 Definitions (GCC Clause 1)

- 1.1 The Purchaser is 'The Executive Director, National Agri-Food Biotechnology Institute (NABI), Mohali (Punjab), INDIA.
- 2 Performance Security (GCC Clause 7) Substitute clause 7.1 of the GCC by the following:
- 2.1 Within 21 days after the Supplier's receipt of order, the Supplier shall furnish Performance Security to the Purchaser for an amount of 10% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations or the EMD submitted by the firm and the complete payment is under hold till the submission of Performance bank guarantee and satisfactory installation of equipment as per the tender terms and conditions. The EMD will be released to the bidder after the receipt of PBG and the payment will be processed after the satisfactory installation of equipments. If any delay in the supply or installation, LD will be deducted accordingly as per tender terms and conditions.
- 2.2 If the performance security is not furnished within the stipulated time as per 2.1 above, the contract shall be deemed terminated in pursuance of GCC Clause 24.
- 3 Inspection and Tests: Inspection and tests prior to shipment of Goods and at final acceptance are as follows:
- 3.1 After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance.
- 3.2 The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.
- 3.3 In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser.
- 3.4 Successful conduct and conclusion of the acceptance test for the installed goods and equipments shall also be the responsibility and at the cost of the Supplier.

4 Manuals and Drawings

- 4.1 Before the goods and equipments are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
- 4.2 The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
- 4.3 Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.

5 Packing (GCC Clause 9) Add as Clause 9.3 of the GCC of the following:

- 5.1 <u>Packing Instructions</u>: Each package will be marked on three sides with proper paint/indelible ink, the following: (i) Item Nomenclature
 - (ii) Order/Contract No.
 - (iii) Country of Origin of Goods
 - (iv) Supplier's Name and Address
 - (v) Consignee details
 - (vi) Packing list reference number

6 Delivery and Documents (GCC Clause 10)

- 6.1 Delivery of the goods should be made within a maximum of 08 to 12 weeks from the date of placement of purchase order and the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:
 - (i) 4 Copies of the Supplier invoice showing contract number, goods' description, quantity, unit price, total amount;
 - (ii) Acknowledgment of receipt of goods from the consignee(s) by the transporter;
 - (iii) Insurance Certificate if applicable;
 - (iv) Manufacturer's/Supplier's warranty certificate;
 - (v) Inspection Certificate issued by the nominated inspection agency, if any, and the Supplier's factory inspection report; and
 - (vi) Certificate of Origin.
 - (vii) Two copies of the packing list identifying the contents of each package.
- 6.2 The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

7 Insurance (GCC Clause 11)

7.1 For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. *In case of orders placed on FOB/FCA basis, the purchaser shall arrange Insurance.*

8 Incidental services (GCC clause 13) The incidental services also include:

- 8.1 Furnishing of 01 set of detailed operations & maintenance manual.
- 8.2 Arranging the shifting/moving of the item to their location of final installation within NABI premises at the cost of Supplier through their Indian representatives.

9 Warranty (GCC Clause 15)

- 9.1 Warranty period shall be 12 months from date of installation of Goods at the NABI site of installation. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.
- 9.2 If a different period of warranty has been specified in the 'Technical Specifications' Chapter then the period mentioned in Clause 9.1 above shall stand modified to that extent.

10 Payment (GCC Clause 16)

- 10.1 For Indigenous supplies, 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at NABI in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 2.1 of SCC.
- 10.2 For Imports, LC will be opened for 100% FOB/CIF value. 70% of the LC amount shall be released on presentation of complete and clear shipping documents and 30% of the LC amount shall be released after the installation and demonstration of the equipment at the NABI site of installation, subject to the production of unconditional performance bank guarantee as specified in clause 2.1 of SCC.
- 10.3 Agency commission, if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items.

11 Penalty Clause (GCC Clause 23)

- 11.1 For delays: GCC Clause 23.1 -- The applicable rate is 1% per week and the maximum deduction is 10% of the contract value / price.
- 11.2The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the NABI site of installation, otherwise the penalty clause will be the same as per the supply of materials.

12 Resolution of Disputes (Clause 27): Add as GCC Clause 27.3 the following:

- 12.1 The dispute resolution mechanism to be applied pursuant to GCC Clause 27 shall be as follows:
 - (i) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Executive Director, National Agri-Food Biotechnology Institute (NABI) Mohali and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
 - (ii) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
 - (iii) The venue of the arbitration shall be the place from where the order is issued.

13 Applicable Law (GCC Clause 29) Add as Clause 29.2 of the GCC the following:

13.1 The place of jurisdiction would be Mohali (Punjab) INDIA.

14 Notices (GCC Clause 30)

14.1 For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.

(I) Purchaser:	Executive Director,
	National Agri-Food Biotechnology Institute,
	Knowledge City, Sector 81, Mohali – 140306.
(ii) Supplier:	(To be filled in by the supplier)

15 Progress of Supply

- 15.1 Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:
 - (i) Quantity offered for inspection and date;
 - (ii) Quantity accepted/rejected by inspecting agency and date;
 - (iii) Quantity dispatched/delivered to consignees and date;
 - (iv) Quantity where incidental services have been satisfactorily completed with date;

- (v) Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;
- (vi) Date of completion of entire Contract including incidental services, if any; and
- (vii) Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).

16 Right to Use Defective Goods

16.1 If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

17 Supplier Integrity

17.1 The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

18 Training

18.1The Supplier is required to train the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

19 Installation & Demonstration

19.1The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the NABI site of installation, otherwise the penalty clause will be the same as per the supply of materials.

20. Price Reasonability Certificate

- 20.1 Please quote best minimum prices applicable for a premier Research Institution, <u>leaving no scope for any further</u> <u>negotiations on prices</u>.
- 20.2 **The quoting party should give a certificate to the effect that** the quoted prices are the minimum and they have <u>not</u> <u>quoted</u> the same item on lesser rates than those being offered to NABI to any other customer nor they will do so till the validity of offer or execution of the purchase order, which ever is later. (Refer: Chapter XV)

Price Reasonability Certificate shall be attached only with the price bid

CHAPTER – V: BID FORM

Executive Director National Agri-Food Biotechnology Institute Knowledge City, Sector 81, Mohali - 140306

Sir,

We undertake that if our bid is accepted to deliver the goods in accordance with the delivery schedule specified and submit the performance security as specified in SCC for the due performance of the contract.

We agree to abide by this bid for requisite period of time after the date fixed for bid opening as per the instructions to the bidders and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this ______day of ______20____

Signature _____

In the capacity of_____

Duly authorized to sign the bid for and on behalf of ______

CHAPTER - VI: BID SECURITY FORM

THE CONDITIONS of this obligation are:

- 1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
- 2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:
 - (a) Fails or refuses to execute the Contract Form if required; or
 - (b) Fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.

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 Purchaser 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.

This guarantee will 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 with Seal of the Bank) (Complete Contact Details with Tel./Fax/email etc)

Name of Bidder

CHAPTER - VII: MANUFACTURERS' AUTHORIZATION FORM

No.

Dated _____

The Executive Director, National Agri-Food Biotechnology Institute Knowledge city, Sector 81, Mohali, Punjab

Dear Sir:

We ______ who are established and reputable manufacturers of having factories at ______ (*address of factory*) do hereby authorize M/s ______ (*Name and address of Agent*) to submit a bid, negotiate and receive the order from you against your tender enquiry.

No company or firm or individual other than M/s ______ is authorized to bid, and conclude the contract in regard to this business.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and Clause 9 of the Special Conditions of Contract for the goods and services offered by the above firm.

Yours faithfully,

(Name) (Name of manufacturers)

Note: This letter of authority should be on the <u>letterhead of the manufacturer</u> and should be signed by a person competent and having the power of attorney to bind the manufacturer. It should be included by the Bidder in its techno-commercial unpriced bid.

CHAPTER – VIII: BIDDER'S PERFORMANCE STATEMENT FORM (For A Period of Last 3 Years)

Name of the Firm.....

Order placed by (full address of purchaser)	Order No. and date	Description and quantity of ordered equipment	Price	Date of completion of delivery as per Contract/Actual	Remarks indicating reasons for late delivery, if any	Has the equipment been installed satisfactory?	Contact Person alongwith Tel. NO., Fax No. & e-mail address

Signature Rubber stamp

Place : Date :

CHAPTER IX: SERVICE SUPPORT DETAILS FORM

S. N.	Nature of training imparted	List of similar type equipments serviced in the past 3 years	Address, Telephone Nos. , Fax and e mail address of the firm located in Chandigarh/Mohali	Value of minimum stock of consumable spares held at all times.

Signature and Seal of the manufacturer/Bidder.....

Place :

Date :

CHAPTER – X: DEVIATION STATEMENT FORM (ITB/GCC/SCC)

The following are the particulars of deviations (ITB, GCC, and SCC Clauses) from the requirements of the tender document and specifications:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

Place:

Date:

Signature and seal of the Manufacturer/Bidder

NOTE:

Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

CHAPTER – XI: TECHNCAL COMPLIANCE STATEMENT FORM

An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.

S. N.	Name of specifications/ part / Accessories of tender enquiry 2	Specifications of quoted Model/ Item	Complianc e Whether "YES" Or "NO"	Deviation, if any, to be indicated in unambiguo us terms 5	Whether the compliance / deviation is clearly mentioned in technical leaflet/ literature 6

(Technical literature/brochures/manuals should be attached alongwith this format)

Please note:

- 1. Compliance/Deviation statement comparing the specifications of the quoted model to the required specifications. This statement should also give the page number(s) of the technical literature where the relevant specification is mentioned.
- Bids must have supporting documents (technical literature or copies of relevant pages from the service manual or factory test data) for all the points noted above. Failing in compliance and proof of compliance will cause cancellation of bid without any further notice/information.
- 3. Specifications are basic essence of the product. It must be ensured that the offers are strictly as per our specifications. At the same time it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. The documentary evidence of conformity of the goods and services to the Bid Document may be in the form of literature, drawings and data, and shall consist of:
 - i. A detailed description of the essential technical and performance characteristics of the goods;
 - ii. An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.

CHAPTER - XII: PERFORMANCE SECURITY FORM

The Executive Director, National Agri-Food Biotechnology Institute Knowledge City, Sector 81, Mohali - 140306

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

This guarantee is valid until theday of......20.....

Signature and Seal of Guarantors

(Complete Address/Contact Details with Tel./Fax/email etc)

Date

CHAPTER XIII: QUALIFICATION REQUIREMENTS

1 The Bidder should be a manufacturer or their dealer specifically authorised by the manufacturer to quote on their behalf for this tender as per manufacturer authorisation form and Indian agents of foreign principals, if any who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". Such equipments must be of the most recent series/models incorporating the latest improvements in design. Similar models should be in successful operation for at least one year as on date of Bid Opening.

2 <u>The bidder should have supplied at least three similar equipment to any Central Govt./State</u> <u>Govt./PSUs/Autonomous bodies in the past five years. The details should be incorporated in the performance</u> <u>statement form along with documentary evidence.</u>

- 3 If required, the bidder may be asked and should be willing to arrange demonstration of the equipment offered, free of charge at on a mutually agreeable place and date prior to opening of priced bids to ascertain their conformity with tendered specifications.
- 4 Details of service support facilities that would be provided after the warranty period should be submitted in the Service Support Details Form.
- 5 That, in the case of a Bidder not doing business in India, the Bidder is/or will be (if successful) represented by an Agent in India who shall be equipped and able to carry out the Supplier's maintenance, repairs and spare parts, stocking obligations prescribed by the conditions of the contract.
- 6 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.
- 7 That the Bidder will assume total responsibility for the fault-free operation of equipment, application software, if any, and maintenance during the warranty period and provide necessary maintenance services for five years after end of warranty period if required.
- 8 Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.
- 9 Any additional bid participation criteria / eligibility conditions etc. mentioned in the Technical Specifications sheet will also form part of the Qualification Requirements along with those mentioned in this chapter.

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CHAPTER XIV – TECHNICAL SPECIFICATIONS

ATOMIC FORCE MICROSCOPE

1. Instrument Resolution

The instrument must have demonstrated atomic lattice resolution in AC mode and contact mode imaging. This must be done with the same large scan-range scanner that can also image at least $90\mu m \times 90\mu m (XY) \& 10 \ \mu m (Z)$ in closed loop. This allows large survey scans with the ability to zoom-in to get high resolution images at a region of interest.

2. Instrument Geometry

- The XY & Z scanner should be decoupled. A combination of Flexure / Piezo type scanners would be acceptable as long as they are able to demonstrate the intended capabilities listed here in with all modes of operation.
- Each axis of motion is independently actuated using its own piezo stack and flexure stage. Should have Integrated position sensors in all three axes provide seamless closed loop operation.
- If the system configuration allows a single scanner to be able to achieve large area and small area high resolution images that would be preferred. However, systems which need multiple scanners for large area scanning and separate for high resolution small area scanning the system offered must include such multiple scanners.
- The cantilever holder and the optical lever assembly (laser, optics and detector) must be housed In a way to eliminates artifacts due to relative motion between the optical lever arm and the cantilever during imaging and force measurements.
- Beam used for deflection detection must approach the probe at an angle that is significantly off vertical relative to the sample, such that reflections from the sample surface do not reflect back into the light source or into the detector.
- Sample Scanning / Tip Scanning or such combination would be acceptable.

3. Operating Modes

3.1 The microscope must be capable of the following scanning modes, each of which requires at minimum that the signals noted in the corresponding parentheses be recordable simultaneously. Each of these signals must be recorded in both trace and retrace scan directions. Here, auxiliary signals refer to external inputs that are independent of the microscope:

- Contact Mode
- Electric Force Microscopy (EFM)
- Force Curve Mode
- Force Mapping Mode (Force Volume)
- Force Modulation
- Frequency Modulation
- Fluid imaging
- Kelvin Probe Force Microscopy (KPFM)
- Lateral Force Mode (LFM)
- Magnetic Force Microscopy (MFM)
- Nanolithography/ Nanomanipulation
- Phase Imaging
- Piezoresponse Force Microscopy (PFM)
- Tapping Mode
- Quantitative Nano Mechanical Maps System must include these capabilities for both storage and loss modulus as minimal. Additional capabilities available may be specified. The pixel resolution of at least 1024 x 1024 pixels to capture such data should be rendered within reasonable scan rates < 10 20 minutes per scan or better
- Conductive AFM The system must allow conductive measurements while scanning as well as at user specified locations
- Any other modes, which occur default modes with the quoted system should also be clearly mentioned.

4. Optical Lever Arm: Light Source and Photodetector

• The instrument optical lever arm must use a low coherence light source (for example, a super luminescent diode, SLD or equivalent Laser source) to reduce artifacts from optical interference effects.

5, System Scanner

- The scanner should be compatible with temperature control options.
- The scanner head should be the following minimal specifications
 - XY with closed-loop feedback control
 - Scan range: \geq 90 × 90 µm (with a single scan head)
 - Noise: ≤ 0.6 nm RMS (closed-loop), ≤ 0.1 nm RMS (open-loop)
 - Demonstrated lattice resolution on mica
 - Z with closed-loop feedback control
 - Scan range: ≥ 10 µm
 - Noise: ≤ 0.25 nm RMS (closed loop)
 - Height noise: ≤ 0.06 nm RMS

X and Y sensor noise must be less than 600pm ADev in a 0.1Hz to 1 kHz BW, with sensor nonlinearity <0.5% at full scan. Scanner noise specifications and representative high-resolution imaging examples must be available for inspection in publicly available brochures, datasheets or websites. The scanner must be compatible with all supplied scan modes and in both air and liquid environments.

System must include a Z scanner with a minimum range of 10 µm that is capable of both open-loop and closed-loop operation. Z sensor noise must be less than 300pm ADev in a 0.1Hz to 1 kHz BW, with sensor Nonlinearity <0.05% at full scan. DC Height Noise must be less than 100pm ADev in a 0.1Hz to 1 kHz BW. Scanner noise specifications and representative high-resolution imaging examples must be available for inspection in publicly available brochures, datasheets or websites. The scanner must be compatible with all supplied scan modes and in both air and liquid environments.

6. Sample Stage

0

The SPM must have manual X, Y and Z positioning stage for coarse movement.

- The instrument must accommodate samples sizes up to 80mm (dia) and 10mm thick or more. This is an essential requirement to render flexibility to the system for mounting various samples.
- **Sample positioning:** XY sample positioning with travel range > 20 mm and an accuracy of minimum 2 micron.
- Sample viewing: Suitable camera system for tip / sample viewing should be included

7.. Controller, Electronics & Software Minimal requirements

System must use at least 24-bit digital-to-analog converters (DACs) in order to generate the XY and Z piezo scan signals. At both 100-micron and 10-nm scan sizes, the corresponding bit resolution must be sub-Angstrom (<0.1nm). Note that this specification applies to the generation of the scanner drive signals, not the sampling of the scanner position sensors.

- The system must provide thermal tunes of the cantilever up to at least 2 MHz.
- The instrument must allow digital Q-control in the range 2 kHz 2 MHz.
- The instrument must include software-controlled relays for the X, Y and Z high voltage supplies and the laser power.
- System must be able to support multifrequency AC mode (tapping mode) operation where two specific
 frequencies are driven simultaneously and detected simultaneously by lockin amplifiers to measure the
 amplitude and phase response at each frequency. Lockin detection alone at two frequencies is not sufficient,
 as both frequencies must be driven simultaneously with a mixed drive signal. Accordingly, the system must
 be equipped with dual / triple lock in amplifiers as required based in individual system design.
- Control and analysis must be user-programmable natively in an entirely open-source software programming language.
- The system's software must include a one-click configuration tool that sets up the software for standard and user-defined operation modes, such as AC imaging in air and liquid, contact mode, EFM, KPFM, PFM, force measurements, etc.
- Software must include a feature that automatically optimizes the imaging gain and setpoint for AC Mode (tapping mode) operation. The feature must use a predictive algorithm such that operation is stable and producing high quality data within the first few scan lines.
- The data acquisition system must be capable of recording individual image sizes of 5000x5000 pixels or greater.
- AFM control software environment must include 3D rendering technology for advanced image display. This feature must allow the user to generate, display and visualize 3 & 4D real-time scan images, as well as off-line processing.
- Must include drift compensation software. Software must allow a region of interest to be tracked in real time to within 1nm of precision while eliminating any scan distortion in the image. Drift compensation must be able to be applied to any imaging, spectroscopy or advanced characterization mode, and in conjunction with

sample heating and cooling options.

• System must include a feature that automatically calibrates the cantilever sensitivity and spring constant by simply selecting the probe type and clicking a button.

8. Instrument Isolation

- The system must include a thermally- and acoustically-isolating enclosure.
- The system must include a vibration isolation table / platform suitable for the system

9. Others

Please clearly list tips provisioned in the standard kit for each mode. For each mode at least 10 compatible tips (with reflex coating wherever applicable) should be quoted optionally if not included in the kit. For AC mode separate 10 tips for hard and soft samples, 10 bio-sample compatible tips for scanning in air and fluid, for MFM mode separate 10 tips with high and low coerceivity should be quoted optionally if not included in the standard kit

Optional:

These will be purchased only if the price falls within the budget available. However, the vendors must state/certify that the AFM system provided will be compatible with these attachments in case these are purchased separately now or in the future.

- 1. The AFM should have an option to upgrade and integrate an Inverted Optical Microscope and allow simultaneous AFM and optical measurements (i.e. brightfield, epifluorescence) and optional phase contrast illumination.
- Electrochemical Cell for AFM systems: The Electrochemical cell assembly should consist of a PEEK fluid cell assembly with working and reference electrodes along with an all PEEK cantilever holder for use with an inbuild or third party supplied potentiostat.
- System should include Heater with a Controller: Should have a Modular heating stage designed especially for high temperature polymer studies. The stage should ride on the XY scanning stage and should be capable of heating samples up to 8 x 8mm from ambient to 250°C. Scanning Tunnelling Microscopy

General Conditions:-

- 1. The complete system (hardware and software) with accessories, consumables necessary for start-up must be quoted. Maintenance kit, if any, should be quoted. Any other absolutely essential accessories for the proper functioning / Operation of the equipment which is not mentioned above should be quoted along with the equipment.
- 2. Free installation and training must be conducted.
- 3. Bidder should give compliance statement point wise showing/highlighting items part no/serial number as quoted in their quotation for comprehensive technical comparison. Proof of compliance should be mentioned point wise in the catalogue.
- 4. Failing in compliance and proof of compliance will cause cancellation of the bid without any further notice/information..
- 5. The bidder should have supplied at least three similiar equipment to any Central Govt./State Govt./PSUs/Autonomous bodies in the past five years. The details should be incorporated in the performance statement form along with documentary evidence.
- 6. Item wise rate should be provided in the price bid.
- 7. The bidder is also requested to quote for the AMC (Annexure "A") and CMC/Extended Warranty (Annexure "B") of five years after the completion of warranty from the date of installation. (optional)
- 8. Those firms who are quoting the rates in foreign currency should clear the items from the New Delhi Airport and hand over the same to NABI, Mohali. NABI will provide the necessary custom duty exemption certificate along with the concessional customs duty as per actuals. DO charges and IAAI charges will be given to the firm as per the actual receipts (No demurrages). All other charges such as customs clearance charges, Inland transportation, loading and unloading charges etc. should be inclusive of the quoted prices. (No deviation)

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CHAPTER XV: PRICE REASONABILITY CERTIFICATE

This is to certify that we have offered the maximum possible discount to you in our Quotation No. ______ dated ______ for (Currency/Value)_____.

We would like to certify that the quoted price are the minimum and we have not quoted the same item on lesser rates than those being offered to NABI to any other customer nor they will do so till the validity of offer or execution of purchase order, whichever is later.

Seal and Signature of the tenderer

Annexure "A"

TERMS AND CONDITIONS OF THE SERVICE CONTRACT (AMC)

- i) During the service contract period, the firm shall provide at least TWO preventive maintenance visits and attend to all emergent and break-down calls per year.

Rate for 1 st year	=	Rs	(Rs. in words)
Rate for 2 nd year	=	Rs	(Rs. in words)
Rate for 3 rd year	=	Rs	(Rs. in words)
Rate for 4 th year	=	Rs	(Rs. in words)
Rate for 5 th year	=	Rs	(Rs. in words)

- iii) The service contract charges should be quoted only for services and travel cost etc. and should not include the cost of any replacement parts/components which shall be arranged by the Institute at its own cost.
- iv) Response time should be 2 working days/5 working days from the time of complaint given to your firm. In case of delay in attending the fault within 2 working days/5 working days the validity of the contract will be extended by another one week beyond the contract period for the delay in each day after two working days/five working days. For service centre point situated in North India 2 Working days and for rest of India 5 Working days
- v) The replaced parts shall remain the property of the Institute.
- vi) The firm shall try to repair the equipment at Institute itself. However, the equipment may be taken to their site, on their own expenses if in case it is not possible to repair the same at NABI, the firm shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till this is handed over to purchaser after repair. Any loss of equipment or its accessories on account of theft, fire or any such reasons shall be the sole risk and responsibility of the firm who will compensate the Institute for such losses at landing cost (at the time of purchase)/ present landing cost of the damaged/lost equipment/part including accessories whichever is higher.
- vii) During the service contract period the parts/components that may be needing replacement shall made available by the Institute at their own expenses and all import formalities, payment of custom duty etc., shall be complied with/borne by the Institute.
- viii) All service contract charges will be invoiced on every half-yearly basis or yearly basis on completion of six months/one year period of annual maintenance contract. The payment of the invoice will be made after verification of service invoice satisfactorily by user within 30 days of the date of submission of the invoice.
- ix) No price revision will be accepted by the Institute during the entire tenure of the service contract agreement.

Seal and Signature of the Tenderer

Annexure "B"

TERMS AND CONDITIONS OF THE SERVICE CONTRACT (CMC/Extended Warranty)

- i) During the service contract period (CMC/Extended Warranty), the firm shall provide at least TWO preventive maintenance visits and attend to all emergent and break-down calls per year.

Rate for 1 st year	=	Rs (Rs. in words)
Rate for 2 nd year	=	Rs (Rs. in words)
Rate for 3 rd year	=	Rs (Rs. in words)
Rate for 4 th year	=	Rs (Rs. in words)
Rate for 5 th year	=	Rs (Rs. in words)

- iii) <u>The service contract charges should be quoted only for services, parts, spares, accessories, travel cost etc</u> and should not include the cost of any consumables which shall be arranged by the Institute at its own cost.
- iv) Response time should be 2 working days/5 working days from the time of complaint given to your firm. In case of delay in attending the fault within 2 working days/5 working days the validity of the contract will be extended by another one week beyond the contract period for the delay in each day after two working days/five working days. For service centre point situated in North India 2 Working days and for rest of India 5 Working days
- v) The firm shall try to repair the equipment at Institute itself. However, the equipment may be taken to their site, on their own expenses if in case it is not possible to repair the same at NABI, the firm shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till this is handed over to purchaser after repair. Any loss of equipment or its accessories on account of theft, fire or any such reasons shall be the sole risk and responsibility of the firm who will compensate the Institute for such losses at landing cost (at the time of purchase)/ present landing cost of the damaged/lost equipment/part including accessories whichever is higher.
- vi) During the service contract period the consumables that may be needing replacement shall made available by the Institute at their own expenses and all import formalities, payment of custom duty etc., shall be complied with/borne by the Institute. For the replacement of spares, parts, accessoires etc, NABI will provide the duty exemption certificate to the firm if required.
- vii) All service contract charges will be invoiced on every half-yearly basis or yearly basis on completion of six months/one year period of maintenance contract. The payment of the invoice will be made after verification of service invoice satisfactorily by user within 30 days of the date of submission of the invoice.
- viii) No price revision will be accepted by the Institute during the entire tenure of the service contract agreement.

Seal and Signature of the Tenderer