



बसु बिज्ञान मन्दिर
BOSE INSTITUTE

P-1/12, C.I.T. Scheme VII-M, Kolkata 700 054, West Bengal, India
Ref : BI-K/E-TEND/05/2020-21



बसु बिज्ञान मन्दिर
BOSE INSTITUTE

P-1/12, C.I.T. Scheme VII-M, Kolkata 700 054

BIDDING DOCUMENTS

For Tender Notice No.

BI-K/E-TEND/05/2020-21

To be addressed to:

Registrar (Officiating)
Bose Institute, Centenary Building,
P-1/12, CIT Scheme - VII -M
Kolkata - 700054 (INDIA)
bipurchase@jcbose.ac.in



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INVITATION TO BIDS

Bose Institute, Kolkata, West Bengal, India invites **online** offers from **foreign/Indian manufacturers** or their Authorized Dealers for supply, installation and commissioning of the following equipment :

| Sl. No. | Name of the items | Qty. | Bid security (EMD) |
|---------|---|------|--------------------|
| 1. | NIM Bin | 02 | INR 20,000.00 |
| 2 | Quad CFD | 02 | INR 21,500.00 |
| 3 | Digitizer and accessories | 01 | INR 17,000.00 |
| 4 | Multi-Channel Analyzer | 01 | INR 15,000.00 |
| 5 | Photo Multiplier Tube (PMT) | 06 | INR 10,000.00 |
| 6 | General purpose plastic scintillator (BC-400 or equivalent) | 02 | INR 7,500.00 |

- **Details of specifications are enclosed in Annexure - I**

| Sl. No. | Particulars | Date & Time |
|---------|--|---------------------------------|
| 1. | Date of uploading of NIT & other documents (Online) (Publishing date) | 22.10.2020 |
| 2. | Documents download start date (Online) | 22.10.2020 at 18:30 hrs. |
| 3. | Clarification Start date Queries to be sent to the mail id bipurchase@icbose.ac.in) | 22.10.2020 at 18:35 hrs. |
| 4. | Clarification End date | 03.11.2020 at 17:00 hrs. |
| 5 | Amendment (if any) (On line) | 09.11.2020 at 18:00 hrs. |
| 6 | Bid submission start date (On line) | 10.11.2020 at 17:00 hrs. |
| 7 | Documents download end date (Online) | 18.11.2020 upto 17:00 hrs. |
| 8 | Bid Submission closing (On line) | 18.11.2020 upto 17:00 hrs. |
| 9 | Last Date of submission of Earnest Money Deposit Including the technical brochure, if any (Off line) | 19.11.2020 upto 17:00 hrs. |
| 10 | Bid opening date for Technical Proposals (Online) | 20.11.2020 at 12:00 hrs. |
| 11 | Date of uploading list for Technically Qualified Bidder (online) | To be notified later |
| 12 | Date for opening of Financial Proposal (Online) | To be notified later |



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SECTION - A

INSTRUCTION TO BIDDERS

- A. **General guidance for e-Tendering** : Instructions / Guidelines for electronic submission of the tenders have been annexed for assisting the vendors to participate in e-Tendering.
1. **Registration of Vendors** : Any vendor willing to take part in the process of e-Tendering will have to enrol and get registered in the Central Public Procurement (CPP) Portal, NIC, GOI through logging on to <http://eprocure.gov.in/eprocure/app> and the vendor is to click on the link for e-Tendering site as given on the above.
 2. **Digital Signature certificate (DSC)** : Each vendor is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders as applicable from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the Web Site stated in Clause A.1. above. DSC is given as a USB e-Token.
 3. The vendor can search & download N.I.T. & Tender Document(s) electronically from computer once they log on to the website mentioned in Clause A.1. using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.
 4. **Submission of Tenders**: Tenders are to be submitted through online as stated in Clause A.1. in two folders at a time for each bid, one in Technical Proposal & the other is Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC). The uploaded documents are to be virus scanned and duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).
 5. A. **Technical Proposal**: The Technical proposal should contain scanned copies of the following in two covers (folders).
 - (a) **Statutory Cover** containing the following documents :
 - (i) **NIT (upload the published NIT accepted using digital signature)**
 - (ii) Bidders' Information Form
 - (iii) Bid Form
 - (iv) Techno-Commercial Bid Form
 - (v) Manufacturer's Authorization Form
 - (vi) Bidder's Performance Statement Form
 - (vii) Service Support Details Form
 - (viii) Technical Compliance Statement Form
 - (ix) **Fall Clause Certificate**



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**** The procurement will be made by Bose Institute in compliance with the Govt. of India rules framed for public procurement from time to time Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the competent authority.**

In this regard the clause and conditions issued as per Ministry of Finance, Department of Expenditure, Public Procurement Division order no F.No.6/18/2019-PPD dated 23 July 2020, must be strictly adhered to and necessary certification as mentioned in the subject order must be submitted alongwith the tender.

(b) **Non-statutory Cover** containing the following documents :
For indigenous quotes the bidder has to upload requisite registration / tax certificate like TAN, PAN, Trade License, CIN, GST etc.

Note : Failure to submit any of the above mentioned documents (listed under 5(a) & (b) may render the bid liable to be summarily rejected for both statutory and non-statutory cover.

5.B. Financial Proposal :

- a. The financial bid should contain the Bill of Quantities (BOQ) corresponding to this tender, which is available on the tender webpage as an MS-Excel file.
 - b. This file must be downloaded and opened with MS-Excel. The rate being quoted by the bidder must be entered in the space marked for this purpose in the file. **Quoted rate will be encrypted under BOQ. In case quoting any rate in Tender Form, the tender is liable to be summarily rejected.**
 - c. All fields in the BOQ file other than those allocated for the name of the bidder and the rate(s) being quoted are non-editable.
 - d. The BOQ file must be saved after this and should be uploaded using digital signature.
 - e. **OPTIONAL ITEMS/Additional Warranty Charge beyond Standard warranty period and training charges (if any) must be separately quoted and uploaded as PDF file.**
- **In the BOQ quoted in INR (click to select currency) fill up the applicable column (i.e. 'Basic Rate', 'GST', 'Other taxes (if applicable)', 'Installation & Commissioning charges (if applicable)' and ignore the other.**
 - **Bidders are requested not to put any percentage (%) in any column of the BOQ.**
 - **As per Govt. Notification # 45/2017 dt.14th November, 2017, Scientific Research Institute funded by the Govt. of India, GST will be applicable @5% for the goods used for research purpose, for the bids where GST will be applicable, against DSIR Certificates to be provided by the Institute.**



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6. Earnest Money Deposit :

- (a). Demand Draft / Bankers Cheque / Bank Guarantee towards Earnest Money (EMD) as prescribed in the N.I.T. should in favour of "Bose Institute" payable at Kolkata.
- (b). Demand Draft / Bankers Cheque / Bank Guarantee towards Earnest Money (EMD) as prescribed in the N.I.T. against each of the instruments in favour of "Bose Institute" payable at Kolkata (original hard copy) *alongwith a covering letter stating the bank details for releasing the said EMD online by the Institute, as per norms to be* submitted to the Purchase Section (Import) at the Centenary Building, P-1/12, CIT Scheme VII-M, Kolkata 700054.
- (c). Bidder must upload copy of valid registration certificate (i.e. MSME, NSIC) for EMD exemption.

THE ABOVE STATED STATUTORY / NON-STATUTORY DOCUMENTS
SHOULD BE ARRANGED IN THE FOLLOWING MANNER

Click the check boxes beside the necessary documents in the My Document list and then click the tab " Submit Non Statutory Documents' to send the selected documents to Non-Statutory folder.

Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents.

***N.B.:** Failure of submission of any of the above mentioned documents as stated in Sl. No. A.5.(a). and Sl. No. A.5.(b). And 6 (a) & (b) will render the bidder liable to be rejected for both statutory & non statutory cover.*



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1. Tender Evaluation Committee (TEC) : Evaluation Committee constituted as per Order of the competent authority of Bose Institute, Kolkata.
2. Opening & evaluation of tender : If any vendor is exempted from payment of EMD, copy of relevant Government Order needs to be furnished and uploaded in the portal as PDF file.
3. Bidders or their representative may wish to be present during tender opening, if they so desire
4. Cover (folder) for Statutory Documents (Ref. Sl. No. A.5.(a).) will be opened first and if found in order, cover (folder) for Non-Statutory Documents (Ref. Sl. No. A.5.(b).) will be opened. If there is any deficiency in the Statutory Documents the bid will summarily be rejected.
5. Decrypted (transformed into readable formats) documents of the non-statutory cover will be downloaded & handed over to the Tender Evaluation Committee.
6. Pursuant to scrutiny & decision of the Tender Evaluation Committee, the summary list of eligible bidders will be uploaded in the web portals.
7. During evaluation the committee may summon of the bidders & seek clarification / information or additional documents or original hard copy of any of the documents already submitted & if these are not produced within the stipulated time frame, their proposals will be liable for rejection.
8. **Financial Proposal :**
 - a). The vendor is required to quote the rate online in the designated field marked for quoting rate in the BOQ. For optional items as mentioned in the specifications may be quoted separately in the additional sheet as enclosed in the Financial Cover.
 - b). Only downloaded copies of the above documents are to be uploaded upon virus scanning & Digitally Signed by the vendor.
 - c). Penalty for suppression / distortion of facts:

If any bidder fails to produce the original hard copies of the documents on demand of the Tender Evaluation Committee within a specified time frame, or if any discrepancy is found between the hard and soft copies that amounts to material deviation, the tender inviting authority may treat such a case as submission of false documents by the bidder and action may be referred to the appropriate authority for prosecution as per relevant IT Act.
 - (d). Rejection of Bid:

Director, Bose Institute reserves the right to accept or reject any Bid or cancel the entire Bidding process at any time prior to the award of Contract without thereby incurring any liability to the Bidder or Bidders or any obligation to inform the Bidder or Bidders the ground for Institute's action.
 - (e). Award of Contract :

The Bidder whose Bid has been accepted finally (both technical and financial), will be informed by the Institute authority for award of contract.
The notification of award will constitute the formation of the Contract.



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| <u>GENERAL INSTRUCTIONS</u> |
|--|
| <ul style="list-style-type: none">The bids would be opened in the presence of the bidders who wish to attend the Bid-opening. However, the representative should bring with them a letter of authority from the corresponding bidders, without which, they are not permitted to attend the bid opening. |
| <ul style="list-style-type: none">The acceptance of the quotation will rest with the competent authority of Bose Institute, Kolkata who does not bind himself to accept the lowest quotation and reserves the right to himself to reject, or partially accept any or all the quotations . |
| <ul style="list-style-type: none">The offer shall be valid for ninety days (90 days) from the date of opening of the technical bid. No revision in price will be allowed after opening the quotation. |
| <ul style="list-style-type: none">Unsolicited / conditional / in complete / unsigned digitally tenders shall not be considered. |
| <ul style="list-style-type: none"><u>Offers that have been blindly copied from the tender specifications are not acceptable and shall be rejected.</u> |
| <ul style="list-style-type: none">The Bidder / Company should not be in the list of black listed firms by any Govt. Dept. / agencies. |
| <ul style="list-style-type: none">The price comparison will be decided as per BOQ comparative chart on the date of opening of financial bid. |
| <ul style="list-style-type: none">Prices are required to be quoted in units. When quotations are given in terms of other units, relationship between two sets of units should be furnished. Quantity discounts, if any should also be indicated. The items should be quoted indicating the serial nos. |
| <ul style="list-style-type: none">To assess in the examination / evaluation, comparison and post qualification of the bids, purchaser may at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the prices or substance of the bids shall be sought, offered or permitted. Any clarification submitted by the bidder in respect of its bid which is not in response to a request by the purchaser shall not be considered. |
| <ul style="list-style-type: none">Either the foreign principal or their Indian Agent can bid in the tender but not both. However, the offer of the Indian Agent should also accompany the authorisation letter from their principal. To maintain sanctity of tendering system, one Indian Agent can not represent two different foreign principals in one tender. |
| <ul style="list-style-type: none">Please indicate the agents in India, their address, the details of service rendered by them & the percentage of commission payable to them. In normal courses agency commission is not allowed. |
| <ul style="list-style-type: none">Two or more vendors cannot submit bid quoting the rates on behalf of same OEM. |
| <ul style="list-style-type: none">The Institute is registered with Department of Scientific & Industrial Research, Govt. of India and thus is exempted from Customs/Central Excise duty vide notification no. 10/97 dated 01.3.1997 and 16/2007 dated 01.03.2007. The present details of registration are no. 11/106/1988-TU-V dt. 31.3.2018. |
| <ul style="list-style-type: none">The mode of dispatch of the items must be mentioned clearly in the quotation. |
| <ul style="list-style-type: none">Samples, if called for, shall be submitted free of charge and on no obligation basis. |
| <ul style="list-style-type: none">The offered delivery period shall have to be strictly adhered to in case an order is placed. |



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SECTION B

TERMS & CONDITIONS

1. **Price :**

- Bidders are requested to give their final and best offer. Techno-Commercial Discussions will be held with the Lowest Bidder only, if necessary.
- Vendors, who do not accept our standard commercial terms are liable to be ignored. A **categorical confirmation of acceptance of all our terms and conditions will have to be observed which enable speedy processing of the offers.**
- Pre-conditioned, incomplete offers, not in line with the terms and conditions of the tender documents, are liable to be rejected.

a. **For Foreign Quotation :**

- The price of the goods, quoted FOB/FCA port of shipment should include Export Packing, Loading Charges, Inland Freight, carriage etc. in the shipper country to be paid by the Supplier.
- The price for transportation / carriage and insurance and other costs incidental to delivery of the goods upto the port of despatch (CIF/CIP).
- 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.
- 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. Conditional offers indicating changes to price quoted due to price increase / decrease by the principal firm, market fluctuations, foreign exchange fluctuations etc. shall make the bid liable to be cancelled.

b. **For Indigenous Quotation :**

- 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.
- The amount payable on account of GST should be mentioned clearly. **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.**
- Rates should be quoted FOR, Bose Institute, Kolkata inclusive of packing, forwarding, installation and documentation & 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, installation and commissioning, freight, documentation, insurance charges, such offers shall be summarily rejected as incomplete.**

2. **Period of validity of Bids :**

- Bids shall remain **valid at least for 90 days** after the date of bid opening prescribed by the Purchaser.
- In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity.



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3. **Bid Currencies** : Prices shall be quoted in Indian Rupees or in freely convertible foreign currency wherever possible for comparison.
4. **Purchaser's Right to vary Quantities at the Time of Award** : 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. However, the Purchaser reserves the right to call the lowest firm for negotiation in case of increase in quantity.
5. **Order acceptance** : The successful bidder should submit acceptance of the Purchase Order immediately but not later than 30 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.
6. **Patent Rights** : 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.
7. **Insurance** : 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
8. **Transportation** : Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India defined as Project site, 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.
9. **Change Orders** :
 - The Purchaser may at any time, by written notice given to the Supplier make changes within the general scope of the Contract in any one or more of the following:
 - Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - The method of shipping or packing;
 - The place of delivery; and/or
 - The Services to be provided by the Supplier.
 - The delivery schedule
 - 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.
10. **Penalty** :
 - 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 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. Once the maximum is reached, the Purchaser may consider termination of the Contract.
 - The applicable rate is 0.5% per week and the maximum deduction is 5% of the contract price.
11. **Applicable Law** : 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 at Kolkata.



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12. **Right to Use Defective Goods :** 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.

13. **Payment :**

Payments shall be made promptly by the Purchaser normally after submission of the invoice or claim by the Supplier.

a. **For Foreign Payment :**

In case of imports, payments are usually made through Letter of Credit (LC) / wire transfer / FDD wherever applicable. The LC will be opened for 100% value but the payment shall be released partly after despatch and partly after installation & commissioning. 90% of payment will be released on shipping documents and remaining 10% on successful installation and commissioning with submission of Performance Bank Guarantee of 10% of the order value. **In case of Purchase Order value equivalent to INR 5 Lakh and above, 10% Performance Bank Guarantee (PBG) should be submitted before establishment of the LC/release of the payment.**

b. **For Indigenous Payment :**

- The general conditions of payment for any indigenous items are 100% payment after successful installation & commissioning of the equipment. In case the equipment does not need any installation & commissioning the period shall be reckoned from the date of delivery & inspection. In case of Purchase Order value equivalent to INR 5 Lakh and above, 10% Performance Bank Guarantee (PBG) should be submitted before release of the payment.

14. **Delivery :**

a. **For Foreign Consignment :**

- Delivery of the consignment(s) should be made within a maximum of **8 weeks from the date of placement of purchase order unless otherwise specified so**. 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/ AWB 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 :
 - 4 Copies of the Supplier invoice showing contract number, goods' description, quantity, unit price, total amount;
 - Acknowledgment of receipt of goods from the consignee(s) by the transporter;
 - Insurance Certificate if applicable;
 - Manufacturer's/Supplier's warranty certificate;
 - Inspection Certificate issued by the nominated inspection agency, if any, and the Supplier's factory inspection report;
 - Certificate of Origin; and
 - Two copies of the packing list identifying the contents of each package.
- The above documents should be received by the Purchaser before arrival of the consignment(s) (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.



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- b. **For Indigenous Consignment :**
The delivery of the consignment(s) should be made within 4-6 weeks from the issue of the Purchase Order, unless otherwise specified.
15. **Bank Charges : For Foreign Procurement :** The bank charges inside India to the applicant account and outside India to the beneficiary account.
16. **Installation :** Installation should be Free of Cost and should be completed within maximum 07-10 days after delivery of the consignment.
17. **Warranty :**
- The Supplier shall 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 shall 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.
 - The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately, within a reasonable period, 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. In case any component has to be imported the same shall be done on DDU Kolkata basis and the purchaser shall provide the customs duty exemption certificate. If the supplier having been notified fails to remedy the defects within a reasonable period, 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.
 - Period of warranty and details have been specified in the 'Technical Specification'.
 - The necessary warranty certificate in this effect should be furnished along with the consignment.
18. **Training :** The Supplier is required to train the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment. The training shall comprise both user training as well as basic maintenance training to person(s) designated by Bose Institute.
19. **Supporting Equipment:** If equipment requires indigenous supporting instruments/accessories (computer, printer, online UPS etc.) at the time of the installation, the same should be either included in the main quote or quoted separately as per the technical specifications.
20. **Service Facility :** Supplier should mention about the possible service set up in India and how capable they are to provide after sales service.
21. **Force Majeure :**
- The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.



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- 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.

22. **Director, Bose Institute reserves the right to accept or reject any or all tenders either in part or in full. The reasons for rejecting the tender of a prospective bidder will be disclosed only when enquiries are made.**



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BID FORM

(to be submitted on the official letterhead of the bidder)

The Director,
Bose Institute,
P-1/12, CIT Scheme-VII/M,
Kolkata - 700054 (W.B.) India

Sir,

Having examined the bidding documents the receipt of which is hereby duly acknowledged, I/We agree to furnish required supplies/services in conformity with the Techno-Commercial Bid or such portions thereof at the prices given in the Price Bid on receipt of order for the same.

I/We agree to hold this offer open until _____ and to supply, install and commission the equipment and complete the whole of the work and hand over to the purchaser within the period of _____ weeks, from the date of receipt of intimation from you regarding acceptance of this tender/receipt of supply order.

I/We agree to submit the bank guarantee as specified in the form prescribed by your goodself for the due performance of the contract, if our bid is accepted.

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

(_____)
Signature of Bidder
With Office Stamp
Name & Address

Telephone No.:

FAX No.:

E-mail address:

Name & Designation of the Contact Person:



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TECHNO-COMMERCIAL BID FORM

| | | | |
|--|--|---|--|
| 1. | Tender reference No | : | |
| 2. | Due date of bid submission | : | |
| 3. | Main Item Model No. | : | |
| 4. | Life Expectancy of the Equipment (in years) | : | |
| 5. | Warranty Period (in years) | : | |
| 6. | Delivery Period of the Equipment | : | |
| 7. | Details of Bank Guarantee enclosed as Bid Security | : | |
| | : | | |
| | Name of the Bank | : | |
| | Branch | : | |
| | Address with Phone, FAX & E-mail Nos. | : | |
| | Amount Rs. | : | |
| | Valid Upto | : | |
| 8. | Country of the Origin of the Equipment | : | |
| 9. | Bid currency | : | |
| 10. | Schedule of Requirements : | | |
| I. | Whether agreeing to all the terms and conditions including payment terms as mentioned in the bidding documents | | |
| II. | Port of Shipment | | |
| III. | Approximate Shipment Weight (chargeable weight) in Kg. of the packed consignment | | |
| IV. | Approximate Dimensions/ Volume of the packed consignment | | |
| Note | | | |
| :: | | | |
| 1. | Adhering to the format given above is a pre-requisite for considering your bid. | | |
| 2. | All columns must be filled up. | | |
| 3. | Separate list should be attached where required in the same format giving details of each item. | | |
| 4. | Please indicate applicability. | | |
| I/we certify that I/We have completely read and understood and agree to all the terms & conditions given in NIT. | | | |

(
Signature of Bidder
With Office Stamp
Name & Address
)



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MANUFACTURERS' AUTHORIZATION FORM

No. _____

Dated _____

The Director,
Bose Institute,
P-1/12, CIT Scheme-VII/M,
Kolkata - 700054 (W.B.) India

Dear Sir:

I/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.

I/We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and Clause 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 letterhead of the manufacturer 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.



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BIDDER'S PERFORMANCE STATEMENT FORM
(For a Period of Last 3 Years)

Name of the Firm.....

| Order placed by (full address with Tel. No., Fax No. & e-mail address of purchaser) | Date | Description and quantity of ordered equipment | Date of completion of delivery as per Contract/ Actual | Remarks indicating reasons for late delivery, if any | Has the equipment been installed satisfactory? (Attach a certificate from the purchaser/ Consignee) |
|--|------|--|--|--|--|
| | | | | | |

Place :

Signature :

Date :

Office stamp



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SERVICE SUPPORT DETAILS FORM

| Sl. No. | 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 Kolkata, if any | Value of minimum stock of consumable spares held at all times. |
|---------|-----------------------------|--|--|--|
| | | | | |

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

Place :

Date :



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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.

| ITEM NAME | | | |
|-----------|-----------------------|-------------------------|--|
| Sl.No. | Tender Specifications | Bidder's Specifications | Deviation/ Remarks, if any Including justification |
| | | | |

(Technical literature/brochures/manuals should be attached along with 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.
2. 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, failure regarding which may result in rejection of bid.
3. In case the bidder furnishes wrong or false information wilfully in the technical compliance chart, such action shall be viewed strictly and the bidders may be blacklisted.
4. Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

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

Place :

Date :



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Quotation No.....

Date :

PROFORMA OF FALL CLAUSE CERTIFICATE

If on any subsequent date after submission of quotation or placing of supply order, the manufacturer (the term manufacturer will also include his authorized distributor / agent) reduces the sale price of such stores or sells such stores to any party at a price lower than the price charged / chargeable against supply order placed by Bose Institute, Kolkata, the manufacturer (including his authorized distributor / agent) as aforesaid in case the quotation is submitted by them and supply / service is also effected by them) will forth-with notify such reduction in sale price to Bose Institute, Kolkata and price payable for the stores to be supplied against the Supply Order after the date of such reduction in sale price coming into force shall reduced **correspondingly and will be reimbursed to the Institute**.

(Signature & Date of Bidders with Rubber Stamp)

*** This certificate should be uploaded on the letter head of the company / firm / agency*



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BID SECURITY FORM

(To be executed by a scheduled Bank in India on non-judicial stamp paper)

To
The Director,
Bose Institute,
P-1/12, CIT Scheme-VII/M,
Kolkata - 700054 (W.B.) India

Dear Sir,

Whereas (Name and address of Bidder) (hereinafter called "the Bidder") in response to your Tender Notification No. dated is submitting its bid for the supply of (Name and/or description of the goods) (Hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that WE (Name of bank) of (Name of country), having our registered office at (Address of bank) (Hereinafter called "the Bank"), are bound unto **Director, Bose Institute, Kolkata, INDIA** (Hereinafter called "the Purchaser") for the sum of (Amount of the Guarantee in Words and Figures) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _____ 20 ____.

THE CONDITIONS of 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;
3. Fails or refuses to execute the Contract Form if required; or
4. Fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.
5. This guarantee is valid up to (six months from date).

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.

Date: Signature.....

Place: Seal of Bankers

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

Witness: 1.

2.



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BOSE INSTITUTE

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Ref : BI-K/E-TEND/05/2020-21

PERFORMANCE SECURITY FORM

(To be executed by a scheduled Bank in India on non-judicial stamp paper)

To
The Director,
Bose Institute,
P-1/12, CIT Scheme-VII/M,
Kolkata - 700054 (W.B.) India

Dear Sir,

Sub: Your Contract No. -----dated -----for

1. You have entered into a contract with reference no as given above with _____ (herein after referred to as the contractor) for the supply, installation, and commissioning of _____ (herein after referred to as stores) for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of said contract, the contractor has undertaken to produce a bank guarantee for Rs. _____ (Rupees _____ only) being 10 % of the total value of the said stores supplied to you, for the due fulfilment of its obligations to you for due performance as per the contract during warranty period.
3. In consideration thereof, we hereby expressly, irrevocably and unconditionally undertake and guarantee as principal obligator on behalf of the contractor that in the event you submit a written demand to us that the contractor has not performed according to the contractual obligations included in the said contract, we will pay you on written demand, without demur and without reference to the contractor any sum up to a maximum amount of Rs _____ (Rupees _____ only). Your demand shall be conclusive evidence to us that such payment is due under the terms of the said contract. Payment by us to you will be made within thirty (30) days from receipt of your request making reference to this guarantee and on demand.
4. This guarantee shall not be revoked without your express consent and shall not be affected by your granting any indulgence to the contractor, which shall include but not be limited to postponement from time to time of the exercise of any powers vested in you or any right which you may have against the contractor and to exercise the same in any manner at any time and either to forbear or to enforce any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving our Bank from its obligation under this guarantee.
5. Notwithstanding anything herein contained, our liability under this guarantee is restricted to Rs _____ (Rupees _____ only) and the guarantee shall remain in force up to and including the _____ day of being reported to us by you and returned to us duly discharged.



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6. Unless a demand or claim under this guarantee is made on us in writing on or before the aforesaid expiry date as provided above or unless this guarantee is extended by us all your rights under this guarantee shall be proscribed and we shall be discharged from the liabilities hereunder.

7. This guarantee shall not be affected by any change in the constitution of our Bank or of the contractor or for any other reason whatsoever.

Date:

Signature.....

Place:

Seal of Bankers

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

Witness:

1.

2.



बसु बिज्ञान मन्दिर
BOSE INSTITUTE

P-1/12, C.I.T. Scheme VII-M, Kolkata 700 054, West Bengal, India

Ref : BI-K/E-TEND/05/2020-21

Item: NIM Bin

Required Quantity: 2 Nos.

Technical Specification:

- Must fit in 19 inch rack
- Pluggable linear power supplies (300 W)
- 12 slots must be there
- Equipped with NIM connectors
- Short circuit protection must be provided
- Over / Under voltage protection must be there
- Over temperature protection must be there
- Control panel with mains switch, control LEDs and LEDs / test pins for all outputs

Noise and ripple

< 5 mVpp @ $\pm 6V$, $\pm 12 V$, $\pm 24 V$ (Max.)

- Required warranty : 1 year
- Supplier must have service centre in India.
- Vendor must submit copies of (i) the purchase order and (ii) user feedback of similar items within last 5 years



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Ref : BI-K/E-TEND/05/2020-21

Item: Quad CFD
Required Quantity: 2 Nos.

Technical Specification:

Four independent Constant Fraction Discriminators for fast detectors with sub-ns rise time

Independently adjustable discriminators parameters (T, W, Z)

Double pulse resolving time down to 4 ns

Fine threshold adjustment from -15 to -1000 mV

Fine walk correction with zero-crossing adjustment

Exceptional low walk jitter < 50 ps

Adjustable output signal width

CFD monitor output

Common veto input and individual gates for coincidence or anticoincidence options

Packaging: 1U-wide NIM unit

Input Channels: 4 inputs (negative polarity, 50 Ohm impedance)

Input linear range: -20 mV ÷ -5 V

Max input amplitude: -10V

Max input frequency: 250 MHz

Threshold range: -15 mV to -1 V

Output width: From 2 ns to 500 ns (jumper setting)

Output rise time: < 600 ps

Output fall time: < 950 ps

Walk: < ±30 ps on -50 mV ÷ -5 V input with 2.5 ns rise/fall time

< ±25 ps on -50 mV ÷ -2 V input with 1.6 ns rise/fall time



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Constant Fraction: 20%

Double Pulse Resolution: < 4 ns

Transmission Delay : Typically < 7 ns with 3 ns external delay.

Operating Temperature Range : 0 to 50°C.

Transmission delay Temperature Sensitivity: < ± 10 ps/°C from 0 to 50°C.

- Required warranty : 1 year
- Supplier must have service centre in India.
- Vendor must submit copies of (i) the purchase order and (ii) user feedback of similar items within last 5 years



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Specifications for Digitizer and accessories

8 channel Desktop Digitizer 14-bit @ 250 MS/s should have following features

- 14-bit @ 250 MS/s
- Analog inputs on coaxial connectors
- Stand alone operation should be there without need of power crate
- 0.5 and 2 Vpp selectable input dynamic range with programmable DC offset adjustment
- Pulse Height Analysis
- Pulse Shape Discrimination
- USB and Optical Link communication interfaces
- Multi-board synchronization features
- Daisy chain capability
- Demo software tools, Common Digital Pulse Processing Control Software both for PHA and PSD mode, C and LabVIEW libraries
- A common acquisition trigger signal should be provided externally via the front panel input connector or via software. Alternatively, each channel should be able to generate a trigger request when the input signal goes under/over a programmable threshold. The trigger requests from the channels can be used locally by the channel, or can be processed by the board to generate a Common trigger causing all the channels to acquire an event simultaneously. The trigger from one board can be propagated to the other boards through the front panel output connector.
- During acquisition, the data stream should be continuously written in a memory buffer. When the trigger occurs, the digitizer should write further samples for the post trigger and freezes the buffer that can be read by one of the provided readout links. The acquisition should continue without any dead time in a new buffer.
- The digitizer should have CLK-IN connector as well as an internal PLL for clock synthesis from internal/external references. Multi-board synchronization should be supported, so all ADCs can be synchronized to a common clock source and ensuring Trigger time stamps alignment. Once synchronized, all data should be aligned and coherent across multiple digitizer boards.
- Software should be provided both in Windows and Linux format. Drivers for all the different types of physical communication channels, C and LabView libraries should be provided.
- Software tool should be provided that allows the user to update the firmware of the digitizers, change the PLL settings, load, when requested.



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Other Specification

| | |
|----------------------|--|
| ANALOG INPUT | 8 channels single ended Impedance 50 Ohm Full Scale Range 0.5 or 2 Vpp SW selectable Bandwidth 250 MHz Offset Programmable DAC for DC offset adj. Range: ± 1 V |
| DIGITAL CONVERSION | Resolution 14 bits Sampling Rate 500 MS/s Simultaneously on each channel |
| ADC CLOCK GENERATION | Clock source: internal/external On-board PLL provides ADC sampling clock generation from an internal (50 MHz loc. oscillator) or external (front panel CLK-IN connector) reference |
| DIGITAL I/O | CLK-IN AC coupled differential input clock LVDS, ECL, PECL, LVPECL, CML Jitter < 100 ppm or better TRG-IN External trigger input NIM/TTL, $Z_{in} = 50$ Ohm General purpose output NIM/TTL, $R_t = 50$ Ohm General purpose input NIM/TTL, $Z_{in} = 50$ Ohm |
| MEMORY | 640 KS/ch Multi-Event Buffer with independent read and write access divisible into 1 - 1024 buffers Programmable event size and pre-post trigger |
| TRIGGER | <u>Trigger Source</u> Self-trigger: channel over/under threshold for either Common or Individual trigger generation External-trigger: Common by TRG-IN front panel connector Software-trigger: Common by software command <u>Trigger Propagation</u> GPO digital output <u>Trigger Time Stamp</u> Standard FW: 31-bit counter, 16 ns resolution, 17 s range PSD/PHA FW: 31-bit counter, 4 ns resolution, 8 s range. Firmware extension to 47-bit (156 h range), and software extension to 64-bit. |
| SYNCHRONIZATION | <u>Clock Propagation</u> One-to-many clock distribution from an external clock source on CLK-IN Clock Cable delay compensation <u>Acquisition Synchronization</u> Sync Start/Stop through digital I/O (TRG-IN input, GPO output) External Trigger Time Stamp reset |



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| | |
|-------------|--|
| POWER | Suitable Power Adapter should be provided (230 VAC/ 50 Hz) |
| Input Cable | Suitable Cable Adapter should be provided with one end BNC and or Lemo |

The following accessories of the digitizer must be provided

- 8 MCX TO LEMO Cable Adapter
- 8 MCX TO BNC Cable Adapter
- Licence for 8ch Digital Pulse Processing

- Required warranty : 1 year
- Supplier must have service centre in India.
- Vendor must submit copies of (i) the purchase order and (ii) user feedback of similar items within last 5 years



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Specifications for Multi-Channel Analyzer

The Multi-Channel Analyzer must have the following specs:

Dual Independent 16k Digital MCA
Suited for high resolution digital nuclear Spectroscopy
Fully controlled by Analyzer software
Selectable Input Dynamic Range and adjustable Digital Fine Gain
Digital oscilloscope function for an easy setup and signal monitoring
Counting Rate up to 1 Mcps
USB and Optical Link communication interfaces
Drivers, libraries must be compatible for Windows and Linux 32/64-bit
Must accept Positive and negative signals

- Required warranty : 1 year
- Supplier must have service centre in India.
- Vendor must submit copies of (i) the purchase order and (ii) user feedback of similar items within last 5 years.



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Specifications of Photo Multiplier Tube

Item: Photo Multiplier Tube (PMT)

Required Quantity: 6 No.

Technical Specification:

Spectral Response: 300 – 650 nm
Wavelength of Max. Response: 420 nm

Photocathode specifications:

Material: Bialkali
Minimum effective area: 46 mm diameter
Windows material: Borosilicate Glass

Dynode specifications:

Structure: Must be Linear Focussed
No. of stages: 10
Operating ambient Temperature: -30 to +50 °C
Storage Temperature: -30 to +50 °C
Anode Pulse Rise Time: 3-4 ns
Transit Time Spread (FWHM): ~ 3-4 ns
Pulse linearity (at +/- 2% Deviation): 150 mA

Supply voltage between anode and cathode: ~ 2000 V or less.

**The PMT must be provided with suitable sockets,
mu-metal shielding,
Voltage divider for biasing.**

- Required warranty : 1 year
- Supplier must have service centre in India.
- Vendor must submit copies of (i) the purchase order and (ii) user feedback of similar items within last 5 years.



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Specifications of Scintillator

**Technical Specification for
General purpose plastic scintillator (BC-400 or equivalent)**

1. Light output : 65 % or better
2. Rise time : less than 1 ns
3. Wave length of maximum emission : 420 +/- 5 nm

Quantity : 2 block of size 40 cm x 40 cm x 1 cm

- Required warranty : 1 year
- Vendor must submit copies of (i) the purchase order and (ii) user feedback of similar items within last 5 years.