



INDRAPRASTHA INSTITUTE *of*
INFORMATION TECHNOLOGY
DELHI

**TENDER FOR SUPPLY & INSTALLATION OF ANECHOIC CHAMBER FOR PERMANENT
CAMPUS OF THE INSTITUTE AT OKHLA PHASE-III, NEW DELHI-110020**

(Tender no. IIITD/ECE/ Anechoic Chamber /020/2022-23)

INVITATION FOR BIDS

Indraprastha Institute of Information Technology -Delhi (IIITD), a State University created by an Act of Govt. of NCT of Delhi, invites sealed bids for Anechoic Chamber (as per specifications mentioned under Scope of Work below) for its campus at Okhla Phase-III New Delhi-110020.

1. An amount of Rs. 25,000/- (Rupees Twenty-Five Thousands only) towards earnest money (EMD) must be deposited in the form of demand draft in favour of “IIIT-Delhi Collections” account, payable at New Delhi. No interest will be paid on the earnest money deposited by the bidder. Tender Document without earnest money will be summarily rejected. EMD is exempted for MSMEs/NSIC registered suppliers.
2. The tender document can be downloaded from the Institute’s website, may please deposit non-refundable Tender Document Fee of Rs.1,000/-+GST extra i.e.(Rs. 1,180/-) (Rupees One Thousand one Hundred Eighty only) in the form of Demand draft drawn in favour of IIIT-Delhi Collections”, payable at New Delhi or may deposit Rs. 1,180/-with the F&A division of the Institute and enclose the receipt with the filled up tender document.
3. The last date for submission of bid is 22nd March, 2023 up to 3:00 PM. The Technical bids shall be opened on the same day i.e. 22nd March, 2023 up to 3:30 PM. The Tender Document should be addressed to:

**Registrar,
Indraprastha Institute of Information Technology-Delhi
Okhla Phase-III
(Behind Govind Puri Metro Station)
New Delhi-110020.**

The document may be deposited in the Tender Box kept in the Store & Purchase department at the Room No. A 107, First Floor, Old Academic Block of the Institute. Bids received after 3:00 PM will not be accepted or considered under any circumstances.

Bidding Procedure:

1. Bids are invited in Two Bids System i.e. (1) Technical and (2) Financial.
Technical and Financial bids should be sealed separately and enclosed in a sealed envelope clearly indicating separately Technical Bid for “ Anechoic Chamber ” and Financial Bid for “ Anechoic Chamber ” addressed to Registrar IIIT-Delhi, Okhla Industrial Area Phase-III, New Delhi-110020.
2. Sealed quotations shall be received not later than 3.00 P.M. on 22 March, 2023. No bids will be accepted after this date & time under any circumstances. The Institute will not be responsible for any postal/courier delay and also for reasons beyond control of the Institute.
3. Technical bids must contain the EMD for specified amount, along with complete technical details as desired by this tender. Technical bids of all the bidders will be opened on pre scheduled date, time & venue. Technical bids without EMD will be summarily rejected. The financial bid will be opened after evaluation of the technical bid. Financial bid of only those meeting the requirement of the Institute will be opened and no representation in this regard will be entertained. The date, time of opening of financial bid will be communicated later.

Scope of Work

ANECHOIC CHAMBER SPECIFICATIONS

A) ANECHOIC CHAMBER:

1. Frequency Range : 0.8 GHz to 40 GHz. A document in support of this must be enclosed.
2. Anechoic Chamber Size (Outer): 3x3x3 Feet (LxWxH) Approximately. Should be upgradable to 110 GHz for considering future aspects. A document in support of this must be enclosed.
3. The shielded structure should be Self Supported GI sheet with a thickness of atleast 2 mm. A document in support of this must be enclosed.
4. Door: A shielded door of 3ft x 7ft (WxH) size, Qty: 1, with BeCu finger Gasket for entry in the room. Standard accessories and manual lever to be provided for entry and exit. Proper stocks should be provided to avoid leakages. A document in support of this must be enclosed.
5. RF Absorbers for the entire frequency range must be installed. Walk-on absorbers on the floor area also to be provided. Absorbers should cover the frequency band upto 110 GHz. As per the reflectivity, it should absorb more than 90%. Total absorbers required shall include walk on absorbers, additional absorbers required to cover other structures in the chamber. A document in support of this must be enclosed.
6. The absorbers except walk on absorbers should be of fire retardant type as per NRL USA standard 8093 Complying tests No's 1,2 & 3 using halogen free fire retardant. Walk ON Absorbers are provided from door to both the ends of anechoic chamber to Tx and Rx sides. A document in support of this must be enclosed.
7. Shielding effectiveness: better than 80dB upto 18 GHz, 60dB upto 40 GHz. A document in support of this must be enclosed.
8. (a) Access/Penetration panel must be provided near to the Instruments side to enable us to connect to the transmitting antenna and receiving antenna. Panel should contain atleast 4 SMA (F to F) and 4 N-type). Provision for attaching extra adapters may be provided.

(b) Access panel should also be able to connect the control cables with suitable RF filters. A document in support of this must be enclosed.
9. Suitable cool air circulating unit to preserve the RF absorbers may be provided. A document in support of this must be enclosed.
10. Suitable LED light (EMI free) with wiring to be provided. A document in support of this must be enclosed.
11. Outer finish should be paint finished/ Laminated board of atleast 8 mm thick. A document in support of this must be enclosed.

12. Provision for hooks from the top to be provided for light weight mountings such as microphones, cameras, etc.

13. Bidder may be required to arrange a demonstration, if required, at no extra cost to the institute.

B. AUTOMATIC 3 AXIS ANTENNA POSITIONER SYSTEMS AND SAMPLE HOLDER POSITIONER SYSTEM: - Should provide the following inside the shield room:

1. Automatic three axis Antenna positioner with toughened PVC/FRP Material or better.

2. Automatic three axis Antenna positioner system should consist following parts:

(a) Central dual axis receiver side positioner system.

(b) RF cables required for measurement. A document in support of this must be enclosed.

(c) The single axis Position controller should hold a sample size of at least 300 x300 x 300 mm (LxWxH) with facility to vary the height (manually) and facilitate movement for polarization.

3 . (a) The positioner system should have position accuracy of 0.1 degree. A document in support of this must be enclosed.

(b) Both the position controller should be controlled by a single controller to ensure synchronous operation.

(c) Central Dual Axis Position controller should be able to point to any direction in the Anechoic Chamber.

(d) All metallic parts including motors and drivers should be contained inside the base having low RCS Material. A document in support of this must be enclosed.

(e) The controllers should exhibit a minimum speed of 6 rpm for all the axes. A document in support of this must be enclosed.

(f) Controller should be based on at least 32 Bit ARM processor and should support multiple modes of operations. A document in support of this must be enclosed.

(g) The controller should be able to operate in the Automatic, Manual and Host Controlled operational nodes.

(h) RS-485 /Ethernet Ports should be there for connectivity with Host Computer.

(i) For Controller Configuration and Monitoring, character LCD display should be used.

(j) Windows based GUI (having all the essential antenna measurement parameters) should be provided for host based controlling.

- Positioner should have following movement:
 - AZ = 360° rotation
 - EL = ± 90°
 - Polarization Axis = 360°
- Positioner should be provided along with Antenna Measurement Software which should be compatible with VNA.

(k) 2D, 3D Radiation Pattern, Gain, Axle Ratio. CP, 'S' Parameters and should able to save in Excel File.

4. Weight capacity of 3 axis antenna Positioner should be around 10 kg & for single axis Positioner system it would be 5 kg.

5. Test reports for the absorbers must be provided.

Power Supply and Safety: -

1. 4 Nos of 20W Emission free LED lights will be installed with suitable wiring inside the chamber. A document in support of this must be enclosed
2. 1 No's of 16A, 230V, single phase power line filter to be provided, installed on side wall. All electric points inside chamber will operate through this filter. A document in support of this must be enclosed
3. Anechoic chamber shall be suitably earthed. Using copper strip Earthling less than 2.0 ohm. Qty: 1 Set. A document in support of this must be enclosed
4. Access Panel of Size 300 mm x 300 mm should be provided on chamber wall, contain adapters (SMA (F to F), 2.92 (f) -2.92 (f)) Qty: 02 numbers.
5. One set or Switch Socket should be provided inside chamber for accessing power along with breakers and ground stud. Qty: 01 Set A document in support of this must be enclosed

Minimum Eligibility Requirement:

1. Bidder should be OEM/Authorized Partner/service provider of the OEM. In case the bidder is an Authorized Partner or Service Provider a valid Agency-ship/Dealership Certificate (MAF specific to this tender) to quote on behalf of OEM should also be enclosed along with the technical bid. **A document in support of this must be enclosed. Bidder should also need to submit Technical Compliance on OEM Letterhead with signed and stamp with the Technical Bid.**
2. OEM/bidders should have Sales and support office in Country. **A self-certified document in support of this must be enclosed.**
3. OEM/bidder should have service and support office in Delhi NCR. **A self-certified document in support of this must be enclosed.**
4. The warranty provided by the bidder should have a back to back arrangement with the OEM. **The declaration should be the part of a Letter of Authorization and signed by competent authority at the OEM.** Warranty for 2 years.
5. The bidder should be ISO 9001 or better certified. **A copy of ISO Certificate should be enclosed.**
6. The bidder should have support centre with minimum 3 relevant support/network engineers. **A self-certified document in support of this must be enclosed.**
7. The vendor/OEM should be able to provide 24x7 NOC & Tele support of their own if required by IIITD at agreed terms. **A self-certified document in support of this must be enclosed.**
8. The bidder shall provide the Registration number of the firm along with the valid GST number with PAN Number allotted by the competent authorities. **A self-certified document in support of this must be enclosed.**
9. The bidder must not be blacklisted by Central Government, State Government or Government of Corporations in India. **A certificate or undertaking to this effect must be submitted.**
10. If the bidder is an authorized partner or service provider of an OEM, **an undertaking from the OEM is required** (please enclose) stating that they would facilitate the bidder on a regular basis with technology/product updates and extends support for the warranty as well.
11. The bidder must be responsible for supply, deploy and support the infrastructure.
12. If vendor /OEM do not meet its SLA, IIITD put the fine of 2000/- Rs. per day for first seven days and @ Rs.5, 000/- per day from 8th day onwards will be levied.
13. Bidders can seek clarifications, raise technical queries etc. related to tender by 10-03-2023 via email to rahul@iiitd.ac.in & ajay@iiitd.ac.in. The replay to clarifications sought or queries raised will be replied within 3-5 days by 15-03-2023 and uploaded on the website of the institute under www.iiitd.ac.in Based on this the bidders may submit bids as prescribed by the due date the time. No clarifications in any other form will be provided.
14. The bidder/tenderer shall submit an undertaking on its letter head, duly signed and stamped, that none of the staff, faculty members, relatives, etc. of the Indraprastha Institute of Information Technology-Delhi are related directly or indirectly to any employees, Directors, or Key Managerial Personnel, etc. of the bidder/tenderer. In the event of the IIIT-D coming to know or pointed about the same, the bidder/tenderer undertakes to deposit a sum of Rs.1,00,000/- (Rs. One Lakh only) as a penalty with the Institute. Such bidders/tenderers shall be liable to be blacklisted and announced on the website of IIIT-D.

Note: Please provide line by line confirmation on each technical specification along with references/supporting documents

The following information must accompany the financial Bid:

1.	Name, address, and telephone number of the firm/company	
2.	Name of the contact person and contact details (mobile/telephone number etc.)	
3.	Name of the Bank and full address	
4.	Bank Account Number	
5.	PAN & GSTIN (Attach self-certified copy)	
6.	Valid self-certified copy of authorization from Bidder	
7.	Copy of Partnership Deed/ Certificate of registration of the company or any other document evidencing the registration of the Bidder	
8.	Number of Years of Experience	
9.	Details of DD towards Tender Fee: EMD:	
10.	Provide the previous PO's of the same items work executed during the last three years (attested copies of the Orders to be enclosed)	
11.	List of service centers, nearest location of the support centre.	
12.	Turnover of the Bidder in the financial years: 2019-20 2020-21 2021-22	

I /We hereby certify that the information furnished above is full and correct to the best of my/our knowledge.

(Signature of the Authorized Signatory)
Name:
Office Seal.

Date:
Place:

TERMS AND CONDITIONS

1. The financial bid should be valid for a period of not less than 60 days from the date of opening of bid.
2. Upon placing of the Purchase Order (PO), the successful bidder is required to submit performance Bank guarantee (PBG) equivalent to 3% of the PO value within 15 days of the date of PO, failing which the EMD amount will be forfeited and the bidder shall be notified as blacklisted. The PBG shall be valid for a period of 60 months from date of purchase order. No interest is payable on the PBG.
3. The product to be supplied within a period of 4-6 weeks from the date of the Purchase Order by the Institute.
4. The bidder should have their own test and repair facility with certified engineers.
5. PBG will be realized by IIIT-D in case of termination of the contract for unsatisfactory performance and/or non-performance of the contract.
6. Bids will be opened in the presence of bidder's representatives, who choose to attend on the specified date and time. Only one representative shall be allowed to attend.
7. Sealed bid can be sent either by post or by messenger. The responsibility of delivery of bid lies entirely with the bidder.
8. 100% payment will be released only on satisfactory installation as per scope of work as certified by officer in charge of the Institute and after producing the GST invoice. Bidder does not agree to above payment terms are requested not to submit their bid.
9. Payment will be paid only if required SLA as mentioned in scope of work is met.
10. In the event of dispute, Director, IIIT-Delhi shall be the sole arbitrator and his decision shall be final and binding on both the parties.
11. IIIT-Delhi does not bind itself to accept the lowest or any other offer and reserves the right to accept or reject any or all the offers either in full or in part without assigning any reason.
12. In case the bidder is not able to execute the Work as per terms, EMD/PBG shall be forfeited.
13. The bidder must be an ISO-9000 certified organization.
14. The bidder should be Original Equipment Manufacturer (OEM) or authorized service provider of the OEM (attach documentary proof). The authorization issued by the OEM must be valid and enclosed.
16. Bidder must submit an attested copy of every page of the tender
17. Bidder should provide details of its support, certification to this effect from the OEM. If vendor /OEM fails to meet the SLAs, a fine of 2000/- Rs per day for first seven days and @ Rs.5,000/- per day from 8th day onwards will be levied.
18. The selected bidder has to sign an agreement with IIITD on a stamp paper after issue of Purchase/Work order. The agreement is attached Annexure 'Y'

PROFORMA FOR FINANCIAL BID

S. No.	Details	Qty.	*All Inclusive Cost (Inclusive of GST) (Please quote in INR only)*
1	Supply and installation of Anechoic Chamber (As per tender scope of Work)	01	
2		Discount, if any	
		Total Amount Rs.	
	<p style="text-align: center;">Total Final Cost (in figures) with Installation at IIIT Delhi campus Okhla Phase III, New Delhi.</p> <p style="text-align: center;">The Bidder may obtain price in Forex (USD) however the quote in financial Bid should be INR only.</p> <p style="text-align: center;"><i>*If any documents are required for availing custom duty exemption, the IIITD will provide the same. Please quote price accordingly.</i></p>		

- Please note the price should be quoted for each of the item should be inclusive of all taxes/charges and installation at IIIT-Delhi Okhla Phase III, New Delhi.

- The Bidder may obtain price in Forex(USD) however the quote in financial Bid should be INR only.

-If any documents are required for availing custom duty exemption, the IIITD will provide the same. Please quote price accordingly.

The discount, if any should be mentioned herein and nowhere else.

Total Cost (all inclusive) of quantity mentioned above (in words) at IIIT-Delhi campus:

We accept that the rate quoted above shall remain valid for a period of 60 days from the last date of the tender document i.e. 60 days from 22nd March, 2023. It is certified that the rates quoted above are not more than the rates charged from any Central / State Govt. Deptt. / Institution / GeM.

(Signature and seal of the Bidder)

ON NON JUDICIAL STAMP PAPER OF RS 100/-

AN AGREEMENT made on _____ day of _____ two thousand Twenty
One
BETWEEN

(Hereinafter called the contractor, which expression shall include its proprietor, partners, heirs, executors, administrators, legal representatives, successors and assignees) WITH REGISTERED ADDRESS.....of the one part

AND

The REGISTRAR Indraprastha Institute of Information Technology Delhi, Okhla Industrial Area Phase III, New Delhi - 110020 (hereinafter called the IIITD, which expression shall include its successors and assignees) of the other part.

Whereas the IIITD had invited Bids <Please write tender name> ; vide its Bid Document No.

_____, which shall be deemed to be a part of this agreement; FOR THE

SCOPE OF WORK/SUPPLY

Whereas the contractor submitted its TENDER Bid dated _____, a copy of the price bid, submitted by the contractor, is annexed hereto as Annexure;

Whereas the IIITD has accepted the Bid submitted by the contractor, on the terms and conditions mentioned in the IIITD's said Bid Document and conveyed its acceptance to the contractor; vide its letter No. _____ dated _____, AND ANY OTHER

CORRESPONDENCEwhich shall be deemed to be a part of this agreement;

Whereas the contractor is agreeable to the terms and conditions mentioned in the IIITD's said Bid document;

Whereas the contractor undertakes to comply with all relevant laws like Contract Labour (Regulation and Abolition) Act, 1970; Employees' State Insurance and Miscellaneous Provisions Act, 1952; Employees' State Insurance Act, 1948; Minimum Wages Act, 1948; Payment of Bonus Act, 1972; Payment of Wages Act, 1936; Income Tax Act; GST Act etc. and to indemnify the IIITD from the contractor's acts of omission or commission, as regards the compliance with the relevant laws;

Whereas the contractor declares that he/she/it shall own all responsibility for any act of omission or commission, as regards the compliance with the relevant laws;

AND WHEREAS the IIITD is agreeable to make necessary payment to the Contractor, at the rates mentioned in the Annexure annexed hereto and as per the terms and conditions mentioned in the IIITD's said Bid Document;

In WITNESS whereof Shri (name), (designation), the authorized representative of the contractor, for and on behalf of the contractor, has hereunto set his hand and for and on behalf of the IIITD has hereunto set his hand.

(Signature of the authorized representative of the Contractor)
Name and designation of the contractor's representative

In the presence of

1

2

(Signature of witnesses with full name and full address)

Registrar
for and on behalf of the IIITD

In the presence of

1

2

(Signature of witnesses with full name and full address)