

राष्ट्रीय विज्ञान केंद्र, दिल्ली
मे
सीलिंग टाइल माइक्रोफोन ऐरे
कॉन्फ्रेंस सिस्टम
की
आपूर्ति, स्थापना, परीक्षण एवं कमीशनिंग
के लिए ई-निविदा

E-TENDER
FOR
SUPPLY, INSTALLATION,
TESTING, COMMISSIONING
OF
CEILING TILE MICROPHONE ARRAY
CONFERENCE SYSTEM
AT
NATIONAL SCIENCE CENTRE, DELHI

NATIONAL SCIENCE CENTRE
(A UNIT OF NATIONAL COUNCIL OF SCIENCE MUSEUMS)
NEAR GATE NO. 4, PRAGATI MAIDAN
NEW DELHI – 110 001



Ministry of Culture
Government of India

**NATIONAL SCIENCE CENTRE,
(A Unit of National Council of Science Museums)
Near Gate No – 4, Pragati Maidan,
Bhairon Marg, New Delhi-110001**

TENDER No. NSCD/18011/E-Tender – 27 / 2024 – 25

NOTICE INVITING E-TENDER

On-line Digitally signed E-Tenders are invited in two Bid System from Manufacturers / authorized dealers for “**Setting up, Installation, Testing and Commissioning of Ceiling Tile Microphone Array Conference System of National Science Centre, Delhi**”. The experienced/eligible manufacturers/reputed authorized dealers may download the tender documents from the Central Public Procurement Portal (CPPP): <http://eprocure.gov.in/eprocure/app>

Bid Document Published Date	27 th January, 2025 (16:00)
Bid Document Download Start Date	27 th January, 2025 (16:15)
Bid Clarification Start Date	27 th January, 2025 (16:45)
Bid Submission Start Date	27 th January, 2025 (17:00)
Bid Clarification End Date	30 th January, 2025 (16:00)
Bid Submission End Date	17 th February, 2025 (14:00)
Technical Bid Opening Date	18 th February, 2025 (15:00)
Date of Technical Presentation at National Science Centre, Delhi	Shall be communicated later on
Financial Bid Opening date	Shall be communicated later on
Estimated Cost	₹15 Lakhs
Earnest Money Deposit	₹ 37,500/-

The online bid both Technical Bid and Financial Bid, should be uploaded by the due date and time as per the above schedule. The responsibility to ensure the same lies with the bidders. Off-line tenders shall not be accepted and no request in this regard will be entertained whatsoever. **Online Technical Bid will be opened at the first instance in National Science Centre, Delhi at 3:00 P.M. on 18th February, 2025 for technical evaluation as well as selection of technically acceptable offers.** In the second stage, the Financial Bids of only the selected and techno-commercially acceptable offers / system / equipment will be opened. Decision of the Centre, regarding selection of eligible and qualified vendors / firms for opening the Financial Bid shall be final and binding on the bidders.

NSC Delhi reserves the right to accept or reject any or all tenders in full or part without assigning any reason whatsoever. NSCD shall also not be bound to accept merely the lowest tender but the technical suitability, capability and superiority of the equipment / system as well as after sales service including infrastructure to render such service, etc. shall be of prime consideration for selection of the equipment /system.

ELIGIBILITY CRITERIA FOR APPLYING

(Copies of relevant supporting documents must be furnished)

1. The agencies who fulfill the following requirements shall **ONLY** be eligible to apply (Joint Ventures are not accepted) having the following eligibility:-

a) Experience of having successfully completed similar works during last Three (3) years **in any Central / State Government organisation / Public Sector undertaking / Autonomous bodies** ending last day of month previous to the one in which applications are invited should be either of the following:
<“**Similar work**” means **Conference Room Solution System Works**>

b) Three (3) similar completed works each costing not less than the amount equal to 40% of estimated cost.

OR

c) Two (2) similar completed works each costing not less than the amount equal to 50% of the estimated cost.

OR

d) One (1) similar completed work costing not less than the amount equal to 80% of the estimated cost.

e) The Firm must be authorised dealer/distributor of the OEM

f) Agencies having valid G.S.T Registration Certificate, TIN & Income Tax Permanent Account Number (PAN)

g) Annual Turnover of the firm shall not be less than ₹40.00 lakh.

h) Certificate from OEM must be produced

i) Last 3 years of Audited accounts of the Firm

2. The intending tenderers/bidders must read the terms and conditions of **National Science Centre, New Delhi- 110001** carefully. They should only submit their bid if they consider themselves eligible and if they are in possession of all the documents required.

3. Information and Instructions for tenderers/bidders posted on website shall form a part of the bid document.

4. The bid document consisting of plans, specifications, schedule of quantities of various types of items to be executed and the set of Terms and Conditions of the contract to be complied with and other necessary documents can be seen and downloaded from <https://eprocure.gov.in/eprocure/app> free of cost.

5. Out of the online bid documents submitted by intending tenderers/bidders, the technical bids of only of those tenderers/bidders shall be opened, who have deposited Earnest Money Deposit / Exemption documents as specified duly scanned, uploaded and found in order and the financial bids of only those tenderers/bidders shall be opened when they uploaded documents are found to be in order.

6. Those contractors not registered on the website mentioned above, are required to get themselves registered before hand.
7. The tenderers should have Digital Signature Certificate (DSC) for filling up the Bids. The Person signing the tender documents should be authorized for submitting the online e-tender.
8. The e-Tenders are invited under two envelopes system. The first electronic envelope will be named as Technical Envelope & will contain documents of tenderer's/bidder's satisfying the eligibility conditions, scanned copies of tender document fees and EMD, NIT, etc. and the second electronic envelope will be named as Financial Envelope containing Rate Quote Sheet. Date of opening of the Financial (BOQ) bid shall be intimated to only such vendors who will be finally qualified at technical stage. The bidder shall submit TECHNICAL BID ENVELOPE and FINANCIAL BID ENVELOPE simultaneously. The technical bids will be evaluated first and thereafter financial bids of only the eligible tenderers /bidders shall be opened. These envelopes shall contain one set of the following documents:-
 - A) **TECHNICAL BID ENVELOPE** (cover-1) shall contain the following documents:
 - i) Scanned copy of Demand Draft/Pay order or Banker`s Cheque of any Nationalised/ Scheduled Bank towards Earnest Money Deposit (EMD) in pdf format in favour of “**National Science Centre**”, payable at New Delhi” or scanned copy of MSME / NSIC Certificate for Exemption of EMD.
 - ii) Scanned copy of Enlistment Order/Registration certificate with appropriate Authority as applicable in pdf format, if any.
 - iii) Scanned copies of proof of eligibility as per Clause No. 2 of specific WORK EXPERIENCE CERTIFICATES / WORK COMPLETION CERTIFICATE along with Work Order/ Letter of Intent issued by Govt./Semi-Govt. /Autonomous/PSUs and/or Reputed Institution of requisite magnitude with appropriate Authority as per the NIT in pdf format.
 - iv) All relevant documents related to Technical Bid as per **Annexure-B**. Upload scanned copy.
 - v) The documents mentioned above in clause-1 i.e. experience certificates/ work completion certificate etc, all complete to be uploaded in the CPPP on or before 02.00 PM on 17/02/2025.
 - vi) Scanned copy of declaration & UNDERTAKING (as per **Annexure – “C”**) duly signed with company seal in pdf format which also includes the undertaking that "The physical EMD shall be deposited by me/us with the office of **National Science Centre, New Delhi- 110001** before the bid opening date otherwise the department may reject the tender/bid and also take action to withdraw my/our enlistment/debar me/us from further tendering in NCSM or any of its constituent units." **However, exemption will be given to the MSME/NSIC registered agencies for submission of EMD.**
 - vii) Scanned copy of Demand Draft for ₹37,500/- as Earnest Money Deposit. Please note that the original DD should be couriered /hand delivered to NSC Delhi / online payment details shall be sent to NSCD before the time of opening Technical Bid.
 - viii) Scanned copy of VALID LICENCE in relevant field in pdf format.
 - ix) The scanned copy of General Terms & Conditions (**Annexure-D**) duly signed by the authorized signatory with official stamp as a token of acceptance of the bidders.

- x) Details of Bidder participating in tender: in pdf format as per **Annexure-B** .
- xi) The scanned copy of Technical specifications and Scope of Work (Annexure-E) duly signed by the authorized signatory with official stamp as a token of acceptance of the bidders.
- xii) Scanned copy of PAN card of the Agency in pdf format.
- xiii) Scanned copy of the GSTIN Certificate of the Agency in .pdf. format.
- xiv) Scanned copy of Income Tax returns for last three (3) years in .pdf. format.
- xv) Detailed layout drawing as per Annexure-F.
- xvi) Tender Document comprising of Schedule of Quantities / specification in pdf. format (TENDERXXXXX.pdf file) digitally signed. (Scanned copy of the NIT and relevant documents duly signed and stamped must be submitted on portal on or before 2.00 PM on 17.02.2025
- xvii) Scanned copy of UNDERTAKING (as **per Annexure-C**) **duly** signed in letter head with company seal with .pdf format.

B) FINANCIAL BID ENVELOPE: The Financial Bid (as per Annexure-H) i.e. Schedule of Price Bid in the form of attached BOQ Proforma shall be duly filled in, digitally signed and uploaded online by the bidder.

Rate Quote Sheet in .xls format.

Bidder shall quote rate in this Envelope.

Order shall be placed in favour of the bidder whose technical bid is acceptable and offered lowest rate of item(s) as per BOQ in Annexure – H.

C) Kindly provide the Break-up of the offered Rate Item-wise as per Annexure H-1 in PDF format.

D) FOR CAMC RATES: The rates for CAMC is to be provided separately in an another envelope in .pdf format as per Annexure – I.

CAMC will be start after 05 years Warranty Period.

9. E-tenders which do not fulfil any of the above conditions or are incomplete in any respect are liable for summarily rejection.
10. The Museum/Centre does not bind itself to accept the lowest e-tender/bid and the right to reject or accept any or all the e-tenders / bids, e-tendered items or schedules received without assigning any reason whatsoever.
11. Canvassing in connection with e-tenders/bids is strictly prohibited and the e- tenders/bids submitted by the tenderers/ bidders who resort to canvassing will be liable for rejection on that ground alone.
12. E-tenders incorporating additional conditions are liable to be rejected.
13. The tenderer(s) must declare in writing that neither he nor any of them is in anyway related to any officer in the National Council of Science Museums, Kolkata or any of its constituent units as per the format given **in Annexure –“C”**.
14. G.S.T or any other tax, Labour Cess etc. or duties on materials, freight & transit Insurance F.O.R. site in respect of this contract will be payable by the successful tenderer. Nothing extra will be payable for increase in such taxes or duties even if imposed or levied either before or after the e-tenders are opened or during currency of contract.

- 15.** Before submitting the e-tender, the tenderer shall examine all specifications, drawings, conditions of contract and inspect the site if necessary. The e-tender must be balanced in respect of individual items so that the rates quoted shall remain in force even if the Quantities deviate (increase or decrease) to any extent before or during the execution of the work. The successful tenderer/bidder shall be paid at their net rate quoted.
- 16.** It may be noted that the Technical Bid Envelope which are not found in order as per requirements may be summarily rejected.
- 17.** Earnest Money Deposit is liable to be forfeited if the successful e-tenderer/bidder selected for the work fails to sign the formal agreement within 07 days from the date of issue of Letter of Intent to them by the Museum/Centre.
- 18.** The selected tenderer will be issued a Letter of Intent by the Museum/Centre and given 07 days mobilization time which shall be counted from the date of issue of the Letter of Intent. Within the mobilization time the tenderer must scrutinize all the working drawings, CPM/PERT/BAR CHART, specifications, etc. and obtain clarifications from the Competent Authority wherever necessary and submit a revised BAR CHART if required by the Museum/Centre. During the mobilization time, the tenderer shall also mobilize all their resources including men and materials, obtain the supply of necessary required items for installation / construction, erect temporary storage facility at site if necessary and sign an Agreement with Museum/Centre in approved format at site on a non-judicial stamp paper of proper denomination. The date of commencement of work shall be the date of issue of Letter of Intent.

CHECK LIST

Check list of Tender No. NSCD/18011/E-Tender-27/24-25 for Setting up, Installation, Testing and Commissioning of Ceiling Tile Microphone Array Conference System of National Science Centre, Delhi.

S. No.	Description	Yes	No
01.	Whether E-Tender uploaded on Central Public Procurement Portal of Govt. of India (i.e. Technical & Commercial) separately.		
02	Whether Tender documents carefully studied & understood.		
03	Whether Tender documents duly signed and stamped on all pages is scanned and uploaded as Part – I of the Tender in central public procurement portal.		
04	Whether Earnest Money of ₹37,500/- submitted by online / vide Demand Draft No. dated..... and Scanned copy of DD uploaded as Part – I of the Tender. Please note that the original DD should be couriered /hand delivered to NSC Delhi / online payment details shall be sent to NSCD before the time of opening Technical Bid.		
05	Whether Declaration regarding Non-relation, duly signed and stamped, and scanned copy of the same uploaded as Declaration –II of the Tender in central public procurement portal. Annexure-C		
06	Whether Declaration certifying that there is no extra conditions quoted in the Offer Form duly signed and stamped, and scanned copy of the same uploaded as Declaration – I of the Tender in central public procurement portal. Annexure-C		
07	Did you visit the actual site for execution of the work & assessing the length of cables, number of connectors & any other miscellaneous item/ accessories required thereby for setting up of the entire system. Item no. 7 in the Scope of Work at Annexure-E may be filled based upon the feedback received from site visit before submitting the Tender		
08	Whether rates regarding CAMC uploaded separately in .pdf format as per provided details at Annexure-I		

Date:

Signature of the Tenderer

Place :

Official Seal

General Information and Instructions

1. The instructions given herein will be strictly binding on the bidders and deviation, if any will make the tender or tenders liable to be considered invalid. Tenders incorporating additional conditions by the bidder are liable for rejection.
2. Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app>
Manual bids shall not be accepted.
3. The instructions given in “Annexure-A” for “**Instruction for Online Bid Submission**” should be strictly followed during submission of the Bid.
4. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
5. An agent of foreign OEM, for submitting the offer on behalf of OEM, would be required to produce a copy of their legal bid agreement with their principal and a copy of registration / enlistment with DGS&D as an Indian agent failing which their bid would be disqualified.
6. Bid should be submitted along with the **Earnest Money of ₹37,500/- (Rupees Thirty Seven Thousand Five Hundred only)** through NEFT/RTGS in the account of National Science Centre as per Annexure F or by way of crossed Demand Draft / Pay Order on any nationalized bank of India payable in favour of “**NATIONAL SCIENCE CENTRE, Payable at DELHI**”. Earnest Money deposit in the form of Bank Guarantee /Bond or any other instrument shall not be accepted and shall be rejected straightway. Earnest Money deposits in respect of such offers which are not accepted will be returned to the bidders within 30 working days from the date on which the final decision is taken about the source from which the items under tender are to be procured or within 2 (two) months from the date of the opening of the tenders, whichever is earlier. No interest will be paid on the Earnest Money deposited with the Council. Earnest Money deposit in respect of the successful bidders will be retained with the NSCD until entire execution of the order as per terms of the tender. If the successful bidder fails to execute the order strictly as per the NSCD’s specification in full or part within the stipulated delivery period of the purchase order, the Earnest Money deposit retained with the NSCD shall be forfeited forthwith after cancellation of the concerned order. In case of non-receipt of EMD, the Tenders are liable to be rejected.
7. No exemption will be allowed for submission of Security Deposit/Retention Money to NSIC/MSME certified firms. **However, concession for submission of EMD shall be applicable to the Tenderers/Bidders registered with NSIC/MSME as per prevailing Govt. guidelines. The Tenderers/Bidders should upload document of the firm of claiming such exemption.** Tenderer/Bidder must upload signed Annexure-C-1, if the bidder is registered under NSIC/MSME’.
8. **Validity of Bids: The Bids should remain valid for 90 days from the date of opening of Financial Bid.**
9. **Rejection of Bids:** Canvassing by the Bidder(s) in any form, unsolicited letter and post-tender correction may invoke summary rejection. Conditional tenders will be rejected. Non-compliance of applicable General Information and Instructions will disqualify the Bid.

N.B. :-

The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by the competent authority of the NSC, Delhi against submission of supporting documentary evidence.

**NATIONAL SCIENCE CENTRE,
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TENDER No. NSCD/18011/E-Tender-27/24-25

Instructions for Online Bid Submission

1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.
2. More information useful for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in/eprocure/app>

REGISTRATION

1. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online Bidders Enrolment**” on the CPP Portal which is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.) with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC“s to others which may lead to misuse.
6. Bidders may then log-in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords, etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective „My Tenders“ folder.
This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3. The bidders should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

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

SUBMISSION OF BIDS

1. Bidders should log-in to the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidders will be responsible for any delay due to other issues.
2. The bidders have to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidders have to select the payment option as “offline” to pay the requisite Earnest Money Deposit (EMD) and enter detail of the instrument.
4. **Bidders should submit the EMD or Exemption Document as per the instructions specified in the tender document. The original instrument should be posted/couriered/given in person to the Tender Processing Section at the above address, latest by the last date of bid submission. The detail of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.**

5. A standard Price Schedule format (BOQ) has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidders). No other cells should be changed. **In case no rate value is required to be quoted in any particular cell , that cell may be kept blank , figure „0“ (zero) shall not be entered in such cell(s) .** Once the details have been completed, the bidders should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidders, the bid will be rejected.
6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referring the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
9. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid number and the date & time of submission of the bid with all other relevant details.
10. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

1. Any enquiries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.
2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal helpdesk. The contact number for the helpdesk is 1800 233 7315.
3. Any queries relating to the Tender may be addressed to neelurajani@yahoo.in , nscdelhi10@gmail.com with proper credentials of the bidders before the bid clarification date thereafter no queries will be entertained.

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TENDER No. NSCD/18011/E-Tender- 27/24-25

TECHNICAL / TECHNO COMMERCIAL BID

Note: ALL PARTICULARS / INFORMATION SHOULD BE GIVEN IN THE FOLLOWING FORMAT WITH COMPLETE DETAILS.

1	Name & Address of the Firm/Bidder	
2	Telephone Number	
	Office	
	Office at Delhi/NCR	
3	State the Name of the Banker including IFSC Code and Account Number of the Tenderer for releasing digital mode of payment.	
4	Background details of the Bidder (State whether original system integrator / authorised Dealer).	
	In case of direct dealers, submit copy of valid dealership license issued by the manufacturer	
5	Past experience in such business for last 3 years giving details of established clients especially Government Offices. Submit satisfactory certificate issued by such clients and Government Offices.	
6	Proof of financial status of the company/audited Balance Sheet for last 3 years indicating total turnover as well (Submit documentary evidence.)	
6(a)	Whether capable to execute the Supply, Installation, Testing and commissioning of Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi, as per minimum requirement/ and Technical Specification given in Annexure-E (Please mention "Yes" or "No")	
6(b)	If it is mentioned "NO" above, submit detailed deviation to be made from enclosed Technical Specification. (Attach extra sheet, if required)	
6(c)	If it is mentioned "YES" above, submit the detail specifications of the offered product including copies of Product brochure.	
7	Whether agreed to offer 5 (Five) Years On-Site warranty for the entire Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi	
8	Minimum down time to handle breakdown calls and/or any sort of emergencies.	

9	Single point contact details for all post-installations service related issues with hierarchy levels (if any).	
10 (a)	Whether agreed to accept comprehensive CAMC after the warranty period is over (State “YES” or “NO”)	
10 (b)	If the answer above is “Yes”, provide detailed address and set up link from where support for maintenance during post warranty shall be offered at NSC Delhi.	
11	Whether agreed to accept the Delivery Schedule mentioned in Clause No.3 of the GENERAL TERMS & CONDITIONS FOR SUBMISSION OF TENDER. (State YES or NO)	
12	Whether agreeable to accept the payment terms mentioned in the clause no 7 of GENERAL TERMS AND CONDITIONS FOR SUBMISSION OF TENDER. (State YES or NO)	
13	If the answer is NO then mention your payment terms. (No advance payment shall be considered / released by the Centre for any reason whatsoever.	
14	Shelf-life time of the Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi, i.e. up to which period technical support as well as spare parts including consumables shall be available with the firm).	
15	Submit technical brochures indicating the detailed technical specifications of the proposed system	
16	Mention GST Registration Number and attach Current valid Tax Clearance Certificate.	

I / We hereby declare that the above statements are true. I / We also declare that the decision of National Science Centre, Delhi regarding selection of eligible firm(s) / type of equipment or system / digital contents scheme for opening of Financial Bid (Part-II) shall be final and binding on me / us.

Dated

Official Seal

Signature of the Bidder/Constituted Attorney

NATIONAL SCIENCE CENTRE
(A unit of National Council of Science Museums)
Bhairon Road, Near Gate No. 4, Pragati Maidan,
New Delhi-110001

TENDER No. : NSCD/18011/E-Tender -27/ 2024 – 25

DECLARATION-I

We do hereby accept the “General Terms & Conditions” as provided by the National Science Centre along with the Tender documents for “**Setting up, Installation, Testing and Commissioning of Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi**”. and also undertake to supply the said materials at National Science Centre, Delhi strictly as per the technical specifications of National Science Centre as provided along with the tender documents, in the event of placement of any order on us. The Centre shall be at liberty to cancel the order in full or in part the event of failure of any of the above declaration made by us.

Signature of the Bidder / Constituted Attorney

DECLARATION-II

This is to certify that I/We have no close relative as an employee of the National Council of Science Museums (close relatives means: Father, Mother, Brother, Sister, Son, Daughter and Spouse) nor any such close relatives are associated with us as proprietor/partner/share holder/ director and like.

Date:

Signature of the Tenderer

Place:

Official Seal

Declaration on Registration as MSME

DECLARATION ON REGISTRATION AS MSME

(Following declaration to be provided by the Bidder on the Company letterhead)

This is to certify that our Company (Name of the Company) located at (Address of the Company) has registered as MSME. The details of registration are provided below:

S. No.	Particulars	Details
1	Vendor Code (allotted by BEL)	
2	Name of the Vendor / Company	
3	Date of incorporation	
4	Udyog Aadhaar Number	
5	GST Number	
6	PAN Number	
7	Type of Enterprise	Micro / Small / Medium
8	Major Activity	
9	Type of Organization	Proprietary / Hindu Undivided Family / Partnership / Co-operative / Private Limited Company / Public Limited Company / Self Help Group / Limited Liability Partnership / Society / Trust / Non-MSME (not a MSME)
10	Have your investment in plant and machinery crossed the prescribed limits of MSME Act	Yes / No Value (for MSME only):
11	Copy of Udyog Aadhaar	Yes / No (for MSME only):
12	Annual ceiling amount upto which they can take contract under MSME	
13	Value of orders already at hand as on date of application	

I / we undertake to keep the National Science Centre, Delhi informed if at any point in future, we cease to become MSME vendor or change in category as per the extant rules and such disclosures is entirely our responsibility. Until then, the company does not hold NSCD as responsible for any issues related to MSME

Date:

Signature of Authorized Person with Company Seal

NATIONAL SCIENCE CENTRE
(A Unit of National Council of Science Museums)
Bhairon Road, Near Gate No. 4, Pragati Maidan,
New Delhi-110001

TENDER No. : NSCD/18011/E-Tender –27/ 2024 – 25

GENERAL TERMS AND CONDITIONS FOR SUBMISSION OF TENDER for Supply, Installation, Testing, Commissioning of Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi, providing operational training, offering onsite warranty support **for a period of two years** of the complete setup. (Rates to be quoted in the provided format at Annexure-I).

The integrated system is to be set up in the existing hall. The detail layout drawing of the available space along with the proposed control room is enclosed for reference in Annexure F. Tenderers are required to submit along with the tender in Part-I envelope, Schematic design and drawings of proposed Conference System, details of mechanisms with complete technical specifications, procurement strategy, flow chart of the work, fabrication strategy and a bar chart on how the work shall be completed within the stipulated time as per Clauses of the General terms and conditions.

- 1. Price:** The rates quoted/indicated shall include cost of all Equipment, labour supervision and all working accessories, tools and tackles, reliable standard testing equipment, etc. and including all handling charges for Supply, Installation, Testing, Commissioning & Post Warranty Annual Maintenance of the system as specified in Annexure-E “Technical specification and Scope of Work”, in the tender document along with post warranty comprehensive maintenance (2 Years) of the complete system. **The rates of GST and other taxes/levies to be imposed on the cost of the system shall have to be clearly and separately mentioned.** Price and rate quoted shall be firm and fixed for the entire period of execution of the work and no escalation of rate on any ground whatsoever shall be allowed.

The rates of GST and other taxes / levies to be imposed on the quoted rates shall be clearly mentioned in the offer form with proper break-up. No Tax exemption (Form C/E/D) will be issued. Prices and rates quoted shall be firm and fixed for the entire period of execution of the order and no escalation of rates on any ground whatsoever shall be accepted.

The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by the competent authority of the NSC Delhi against submission of supporting documentary evidence.

2. The successful tenderer shall submit the following documents within 07 (seven) days from the date of placement of Letter of Intent.
 - i) Duplicate copy of the Purchase order duly signed and stamped as a token of acceptance of the order.
 - ii) Non-judicial stamp paper of appropriate value for preparing the Agreement governing the terms and conditions of the Contract.
 - iii) Security Deposit as detailed in clause No. 06 of General Terms & Conditions

3. Time of Completion : Time is the essence of the tender. The entire work viz. Supply, Installation, Testing & Commissioning of the system shall be completed in time bound manner. The entire work shall be completed within **30 (Thirty) days** from the date of placement of Letter of Intent.

For non-compliance of any of the above terms and non-delivery of the tendered item complete in all respects within the above stipulated period, the Centre shall either cancel the order or impose penalty as detailed in clause 4 below. The Centre reserves the right to cancel the order and no payment will be made under such condition. Decision of the Centre in this regard shall be final and binding on the successful tenderers.

4. Penalty Clause: The successful Tenderer shall strictly observe the time allowed for carrying out the job as detailed in clause No. 3. The job shall, throughout the stipulated period of the order be proceeded with all the diligence (time being deemed to be the essence of the order) and the successful Tenderer shall pay to the Centre, an amount equal to 1% of the amount of the order value for every week that the delivery may remain incomplete as per delivery schedule as stipulated in clause no. 3, subject to a maximum compensation of 10% of the order value and after that period appropriate action will be taken by the Centre, as it will deem fit.

The Centre may extend the time of delivery of the tendered job at its discretion on the application of the successful tenderer for such purpose provided that it considers the reasons for such extension as good, sufficient and acceptable.

5. Technical Specifications and Scope of work: As per Annexure “E”

6. Security Deposit: The successful tender shall deposit 10% of the gross value of the work awarded, as refundable security deposit after adjusting the EMD already deposited with this NIT, which is to be paid Online or in the form of Bank Draft / Banker’s cheque by the tenderer in favour of ‘National Science Centre, Delhi’ as per Bank Details given in the Tender document. The Security Deposit of the successful tenderer shall be released as mentioned below (**Warranty period shall be 5 (Five years) from the date of final completion of the work / job**). In case the total value of order exceeds the assessed value of the work order, security deposit for the excess amount will also be deducted. No interest shall be paid on the security deposit retained with National Science Centre, Delhi. The Security Deposit of the successful tenderer shall be released as follows:-

- a) 20% after completing 1st year of warranty period.
- b) 20% after completing 2nd year of warranty period.
- c) 20% after completing 3rd year of warranty period.
- d) 20% after completing 4th year of warranty period.
- e) 20% after completing 5th year of warranty period.

6 (A) Security Deposit for CAMC: The successful tender shall deposit 10% of the CAMC Amount as refundable after completion of the CAMC Period.

7. Payment Terms :

A. **For SITC of Ceiling Tile Microphone Array Conference System:**

- a) No advance payment shall be made by the Centre under any circumstances. However, interim payment shall be released at the discretion of the Centre on the following :-
 - i) Upto 50% payment may be released after supply of the entire equipment / materials at site.
 - ii) Balance 50% (Final) payment shall be released within 30 days from the date of receipt of Tax-Invoice duly supported by receipted challan and satisfactory inspection / work completion certificate from NSCD authority for the entire job and providing satisfactory operational training to NSCD officials.

b) Payment shall be released through NEFT/RTGS for which details of bank account shall be mentioned in their bill.

B. For Comprehensive AMC*

Payment shall be released on quarterly basis after providing satisfactory services subject to submission of pre-receipted Tax Invoice for the quarter. (*Regarding the quoted rates for CAMC, the final right whether proceeding for further CAMC will be decided by the Higher Authorities of National Science Centre, whose decision will be final either to continue further or not)

8. In case, the successful Tenderer refuses to accept the offer after finalization or does not comply with the Clause No.2 within 07 (Seven) days from the date of placement of the order as per the finalized and accepted terms and conditions, the order shall be cancelled forthwith without any further reference and the EMD will be forfeited.
9. **Defect Liability period / WARRANTY PERIOD:** The Warranty/ Defect Liability period shall be **Five (5) years** from the date of certification of the completion of satisfactory installation and commissioning of the system. The successful tenderer shall be responsible for all defects of the installed equipment or other defects of equipment supplied, making good bugs in the hardware, etc. for a period of **FIVE Years** from the date of satisfactory completion of the installation and commissioning of the system. The successful tenderer, shall at their own cost, rectify the defects and or replace the defective parts/equipment, up to the complete satisfaction of the competent authority of the Centre.
10. Every effort should be made to complete the work by the successful Tenderer within the specified time schedule. In case the successful tenderer fails to comply with Clause No.3 i.e., the specified time schedule as per the finalized and accepted terms and conditions the Centre shall have the rights to either impose Penalty Clause or cancel the order forfeiting the EMD. The decision of the Centre in this regard shall be final and binding on the successful Tenderer.
11. Bad quality workmanship will not be accepted and if carried out is liable to be rejected and should be rectified by the successful Tenderer at his cost as per specifications and directions given by the authorized representatives of the Centre. The decision of the Centre, as to items of bad quality workmanship and proper rectification, will be final and binding on the successful Tenderers.
12. Specifications of the items under tender are enclosed for guidance. However, if any ambiguity in the specification is detected, it shall be promptly brought to the notice of the National Science Centre, Delhi for clarification. The successful bidder should obtain written approval from competent authority of NSC Delhi for any deviation from the approved specifications, if required due to site conditions or for betterment and safety of visitors and installations.
13. The successful Tenderer shall submit necessary trade and other licenses as may be required to carry on the tendered job and shall also be responsible for compliance at his/her own cost of all rules and regulations, enforced from time to time by the appropriate authorities.
14. The successful Tenderer shall not under any circumstances whatsoever transfer wholly or partly the contract/agreement/Purchase Order to any other person(s)/firm/company or assign the agreement or benefits of this agreement to any other party for any reason whatsoever. Otherwise the order/ agreement will automatically stand cancelled.
15. The authorities of NSC Delhi do not bind themselves to accept the lowest tender and reserves the right to accept or reject any or all tenders wholly or partially without assigning any reason whatsoever.

16. The authorities of the Centre, reserve the right to amend, alter or modify the terms and conditions mentioned above, if necessary, from time to time.
17. Income Tax and Work Contract Tax shall be deducted at source, if applicable, from each bill/claim of firm as per prevailing Government rules.
18. Incomplete offers, i.e. offers received without prescribed “General Terms & Conditions” & Technical Specifications” shall be rejected straightway without reference to the tenderer.
19. The agency must have valid GST/TIN/WCT/PAN number and attach a documentary proof with the Tender. Bidders are requested to enclose a copy of their valid certificate of PAN/ TAN/GST or any other document as requested by the Institute with their tender.
20. The agency shall take care of all statutory obligations as are required under the Contract Labour Regulation Act, etc.
21. The offer shall be valid for a minimum period of 3 months from the date of opening of the tender.
22. The agencies participating in the tender and bidding, may obtain on specific request, details about the outcome of the tender and other related details, if any.
23. Neither National Science Centre, will not be liable for any injury or death of an employee who is deployed by the successful bidder within/outside the work site during the time of execution of the work order.
24. All disputes and differences between the successful tenderer and the Centre of any kind, except quality of workmanship and materials, whatever arising out of or in connection with the order on carrying out of the work (whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of the terms and conditions of the order) shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard will be final and binding on both the parties – the successful Tenderer and the Centre. The provisions of the Arbitration and Conciliation Act 1996 or any statutory modification or re-enactment thereof and of the rules made there under for the time being in force shall apply to arbitration’s proceedings under this Clause.
25. FORCE MAJEURE:-In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under the contract, the relative obligation of the party affected by such Force Majeure shall be suspended for the period during which such cause lasts. The term “Force Majeure” as employed herein shall mean acts of God, War, Civil Riots, Fire directly affecting the performance of the MOU, Flood and Acts and Regulations of the government. Upon the occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing, the beginning of the cause amounting to Force Majeure as also the ending of the said cause by giving notice to the other party within 72 (seventy two) hours of the alleged beginning and ending of the cause respectively. If performance under the MOU is suspended by Force Majeure conditions lasting for more than 02 (two) months, either party shall have the option of cancelling the MOU, in whole or in part, at its discretion without any liability on its part.
26. Make in India (MII) The tender abide with GOI order date 15th June 2017 to give purchase preference to Make in India (MII) product mentioned in order. Document link as follows:
https://dpiit.gov.in/sites/default/files/publicProcurement_MakeinIndia_15June2017.pdf

NATIONAL SCIENCE CENTRE
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Bhairon Road, Near Gate No. 4, Pragati Maidan,
New Delhi-110001

Technical Specification & Scope of Work for SITC of Ceiling Tile Microphone Array Conference Room system:

A. During Installation:

Supply, Installation, Testing & Commissioning of all the equipments/ material of Ceiling Tile Microphone Array Conference Room System in the Conference Room of NSC, Delhi. Proper clipping & dressing up of all the cables, speaker cable laying using proper conduiting, etc. are all in the scope of work of the tenderer. Provision for switching off the Ceiling Tile microphones by pressing any one of the multiple switches provided on different tables shall be incorporated at the time of installation and is in the scope of agency.

Integration of the entire system for the online meetings is in the scope of the agency for which any hardware/software required shall be provided by the agency.

B. After Installation and during CAMC: The agency must attend all complaints in the system within 24 hrs. of its reporting. In case there is failure of a critical equipment like DSP, Amplifier, etc., the same must be replaced by a standby equipment till the faulty equipment is rectified.

Specifications of Supply, Installation, Testing & Commissioning of Conference Room System with following specifications:

S.No.	Name of Equipment/	Specifications	Quantity reqd.
1.	Ceiling Tile	<p>Ceiling microphone with dynamic Beamforming technology should have following features:</p> <ul style="list-style-type: none"> - beam shall automatically detect the position of the person speaking and follow the person around the room at all times - shall have 2 x Dante digital audio (Redundancy), Analog audio out (Phoenix 3-pin), and Ethernet for Control and PoE connectivity ports - shall have coverage of minimum 800 square feet or more - shall have a true voice lift feature to increase audio intelligibility above the ambient noise floor - shall support IT industry standards like IEEE 802.1x - it can be controlled through software that can control and monitor the microphone in any network - shall have min 100 dB SPL, 5ms latency, and min 90dBA or higher dynamic range - High-precision audio settings for maximum control, setting to exclude (min 5) and prioritize the areas of the room - shall be certified from Microsoft Teams and Zoom Video conferencing applications - shall have UL 62368 certification (including UL 2043 testing and compliance) and safety certifications. Microphone -OEM should have Company owned service centre present in india and should be incorporated for more than 5 yrs in India. <p>Preferred Make: Sennheiser</p>	2 Nos.

2.	Digital Signal Processor	Open Architecture Digital Signal Processor with - 8 Flexible channels individually configurable as Mic/Line Input with Phantom Power or Line Output - GPIO Ports : 8x8 or better - AEC channels: 8 or more with 200ms tail length - Minimum 8x8 Dante channels and support for up to 64x64 Network audio channels via Dante /AES67 or similar protocol - SIP Softphone integration for Audio conferencing - USB-B & C port supporting AV USB Bridging for software or web-based conferencing applications emulating USB Audio (Speakerphone) and USB Video (Camera) driver. 24 bit-A/D-D/A converters or better, 48 kHz Sample rate or better, Input frequency response of 20 Hz to 20 kHz or better, Input dynamic range > 109 dB or better - RS232 Ports: 2 or more - The processor should support Network amplifiers without any additional cards or accessories. Preferred Make: QSC/Biamp/Symetrix	1No.
3.	Control Expansion	Control Network control expander with serial ports. Ports - 1xconfigurable serial port (RS232/RS485/RS422), 3xRS232 ports or better, Power- PoE and AUX. Ethernet daisy-chaining up to four units. Surface and Wall-mountable hardware included. Preferred Make : QSC/Extron/Crestron	1 No.
4.	License	Software of hardware based control system to control the devices in the room with perpetual license to control devices via Ethernet, Serial, IR or GPIO connections without any limit. System should support Wired Table or Wall mountable touch panels and iOS/Android/Windows devices as wireless touch controllers. Minimum five touch controllers should be supported simultaneously. Preferred Make: QSC/Extron/Crestron	1 No.
5.	Speaker system	2-way, Ceiling-mount loudspeaker. Frequency range - 65 Hz to 20 kHz or better, Rated RMS Power - 30Watts or better, Sensitivity-89 dB SPL or better, Coverage Angle-110° conical or better, Maximum SPL Continuous/Peak-104dB/110dB or better, Rated Impedance - 8 Ohms. Transformer Tapping - 70V/100V(30, 15, 7.5watts) or better. Transducer - LF - 6.5-inch or better, HF- .86-inch or better coaxially mounted with LF, Material - Painted ABS polymer Baffle and Power coated steel grille or better. Safety rating - UL1480, UL2043. Mounting rails and C-Ring for ceiling tile included. Preferred Make: QSC/Bose/Biamp	8 Nos.
6.	Amplifier	Quad channel class-D amplifier with 60 watts/channel into Low-Z loads or better. Four channels can also be bridged in pairs or power sharing, each pair providing up to 100 watts rms into 4 /8 ohms or 125 watts rms into 70V/100V or better. Signal to Noise (A weighted, 20 Hz-20 kHz)->100 dB or better, Frequency Response-20 Hz - 20 kHz or better, Input Sensitivity-1.23 Vrms (+4 dBu) or better, Input Impedance->10 kΩ (balanced), >10 kΩ (unbalanced) or better, Front Panel Indicators-Power, per channel Signal, per channel Protect/Limit, Controls- 4Ω/8Ω/70V Bridge Highpass On/100V Bridged Highpass on per channel pair. Should be Energy star rated. Size - half RU with rack mounting hardware included. Preferred Make: QSC/Bose/Biamp	2 No.
7.	Miscellaneous item/ accessories	Cables, connectors or any other accessories for setting up of the entire system based upon the feedback received from the site visit.	1 No.
8.	Custom made A V rack	Rust Free, Sleek Body	
9.	Installation	Programming, Installation, Testing, Integration with software, commissioning & operational training to employees	1 Job
10.	Warranty	FIVE years onsite warranty on the entire setup	

BANK DETAILS OF NATIONAL SCIENCE CENTRE, DELHI

Name of the Account Holder	NATIONAL SCIENCE CENTRE, DELHI
Account No.	2417101004100
Bank Name	CANARA BANK
Bank Address	6, Bhagwan Das Road, New Delhi
IFSC Code	CNRB0002417
MICR Code	110015045
Type of Account	Saving Account
Branch Code	2417
GST No.	07AAAAN2541C1Z5

Annexure- H (Sample Offer Form / BOQ)

Validate

Print

Help

Tender Inviting Authority: Director, National Science Centre, Delhi
ANNEXURE - H

Name of Work: Supply, Installation, Testing and Commissioning of Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi.

Contact No: NSCD/18011/E-Tender-27/2024-25

Name of the Bidder/ Bidding Firm / Company :

PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST Percentage (%)	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT With Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	15	53	54	55
1	Supply, Installation, Testing and Commissioning of Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi.							
1.01	Supply, Installation, Testing and Commissioning of Ceiling Tile Microphone Array Conference System at National Science Centre, Delhi.as per Annexure -E.	1.00	No.			0.00	0.00	INR Zero Only
Total in Figures						0.00	0.00	INR Zero Only
Quoted Rate in Words						INR Zero Only		

NATIONAL SCIENCE CENTRE
(A Unit of National Council of Science Museums)
Bhairon Road, Near Gate No. 4, Pragati Maidan,
New Delhi-110001

SITC of Ceiling Tile Microphone Array Conference Room System with Breakup of the offered rate (In PDF File)

Sr. No.	Name of Equipment/	Specifications	Quantity required	Rate per Unit	Total (₹)
1.	Ceiling Tile	<p>Ceiling microphone with dynamic Beamforming technology should have following features:</p> <ul style="list-style-type: none"> - beam shall automatically detect the position of the person speaking and follow the person around the room at all times - shall have 2 x Dante digital audio (Redundancy), Analog audio out (Phoenix 3-pin), and Ethernet for Control and PoE connectivity ports - shall have coverage of minimum 800 square feet or more - shall have a true voice lift feature to increase audio intelligibility above the ambient noise floor - shall support IT industry standards like IEEE 802.1x - it can be controlled through software that can control and monitor the microphone in any network - shall have min 100 dB SPL, 5ms latency, and min 90dBA or higher dynamic range - High-precision audio settings for maximum control, setting to exclude (min 5) and prioritize the areas of the room - shall be certified from Microsoft Teams and Zoom Video conferencing applications - shall have UL 62368 certification (including UL 2043 testing and compliance) and safety certifications. Microphone -OEM should have Company owned service centre present in india and should be incorporated for more than 5 yrs in India. <p>Preferred Make: Sennheiser</p>	02 Nos.		
2.	Digital Signal Processor	<p>Open Architecture Digital Signal Processor with</p> <ul style="list-style-type: none"> - 8 Flexible channels individually configurable as Mic/Line Input with Phantom Power or Line Output - GPIO Ports : 8x8 or better - AEC channels: 8 or more with 200ms tail length - Minimum 8x8 Dante channels and support for up to 64x64 Network audio channels via Dante /AES67 or similar protocol - SIP Softphone integration for Audio conferencing - USB-B & C port supporting AV USB Bridging for software or web-based conferencing applications emulating USB Audio (Speakerphone) and USB Video (Camera) driver. 24 bit-A/D-D/A converters or better, 48 kHz Sample rate or better, Input frequency response of 20 Hz to 20 kHz or better, Input dynamic range > 109 dB or better - RS232 Ports: 2 or more - The processor should support Network amplifiers without any additional cards or accessories. <p>Preferred Make: QSC/Biamp/Symetrix</p>	01No.		
3.	Control Expansion	<p>Control Network control expander with serial ports.</p> <p>Ports - 1xconfigurable serial port (RS232/RS485/RS422), 3xRS232 ports or better, Power- PoE and AUX. Ethernet daisy-chaining up to four units. Surface and Wall-mountable hardware included.</p> <p>Preferred Make : QSC/Extron/Crestron</p>	01 No.		

4.	License	Software of hardware based control system to control the devices in the room with perpetual license to control devices via Ethernet, Serial, IR or GPIO connections without any limit. System should support Wired Table or Wall mountable touch panels and iOS/Android/Windows devices as wireless touch controllers. Minimum five touch controllers should be supported simultaneously. Preferred Make: QSC/Extron/Crestron	01 No.		
5.	Speaker system	2-way, Ceiling-mount loudspeaker. Frequency range - 65 Hz to 20 kHz or better, Rated RMS Power - 30Watts or better, Sensitivity-89 dB SPL or better, Coverage Angle-110° conical or better, Maximum SPL Continuous/Peak-104dB/110dB or better, Rated Impedance - 8 Ohms. Transformer Tapping - 70V/100V(30, 15, 7.5watts) or better. Transducer - LF - 6.5-inch or better, HF- .86-inch or better coaxially mounted with LF, Material - Painted ABS polymer Baffle and Power coated steel grille or better. Safety rating - UL1480, UL2043. Mounting rails and C-Ring for ceiling tile included. Preferred Make: QSC/Bose/Biamp	08 Nos.		
6.	Amplifier	Quad channel class-D amplifier with 60 watts/channel into Low-Z loads or better. Four channels can also be bridged in pairs or power sharing, each pair providing up to 100 watts rms into 4 /8 ohms or 125 watts rms into 70V/100V or better. Signal to Noise (A weighted, 20 Hz-20 kHz)->100 dB or better, Frequency Response-20 Hz - 20 kHz or better, Input Sensitivity-1.23 Vrms (+4 dBu) or better, Input Impedance->10 kΩ (balanced), >10 kΩ (unbalanced) or better, Front Panel Indicators-Power, per channel Signal, per channel Protect/Limit, Controls- 4Ω/8Ω/70V Bridge Highpass On/100V Bridged Highpass on per channel pair. Should be Energy star rated. Size - half RU with rack mounting hardware included. Preferred Make: QSC/Bose/Biamp	02 No.		
7.	Miscellaneous item/ accessories	Cables, connectors or any other accessories for setting up of the entire system based upon the feedback received from the site visit.	01 No.		
8.	Custom made A V rack	Rust Free, Sleek Body			
9.	Installation	Programming, Installation, Testing, Integration with software, commissioning & operational training to employees	01 Job		
10	Warranty	Five years onsite warranty on the entire setup			
Total ₹(Including GST)					

Signature of the Tenderer with Seal

**NATIONAL SCIENCE CENTRE,
(A Unit of National Council of Science Museums)
Near Gate No – 4, Pragati Maidan,
Bhairon Marg, New Delhi-110001**

CAMC for the work of Ceiling Tile Microphone Array Conference System of National Science Centre, Delhi.

RATE OFFER FORM

S.No.	Item Description	Qty.	Offered Rate
01.	CAMC Charges for 1 st (First) Year	01 Job	
02.	CAMC Charges for 2 nd (Second) Year	01 Job	
03	CAMC Charges for 3 rd (Third) Year	01 Job	
04	CAMC Charges for 4 th (Fourth)Year	01 Job	

- Note: The above Annexure-I is a format on which rate is to be quoted in the Offered Rate Coloumn. The Annexure-I format has to be uploaded separately apart from the BOQ rate sheet in .pdf format.

Date:

Signature of the Tenderer

Place :

Official Seal