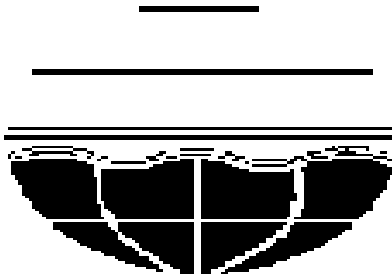


**COMPETITIVE BIDDING (CB)  
FOR SUPPLY, INSTALLATION, COMMISSIONING  
AND OPERATION & MAINTENCE  
OF REAL TIME AMBIENT NOISE MONITORING NETWORK  
DELHI POLLUTION CONTROL COMMITTEE, DELHI**

Tender No.:DPCC/Lab(A)/2019/T03



**Delhi Pollution Control Committee,  
4<sup>th</sup> and 5<sup>th</sup> Floor, ISBT Building,  
Kashmere Gate, Delhi-110006**

## INDEX

<b>Section No.</b>	<b>Name of the Section</b>	<b>Page No.</b>
Section-I	Notice Inviting e-Tender (NIT)	3
Section-II	Instructions to Bidders	4-11
Section-III	General Conditions of Contract	12-17
Section-IV	Schedule of Requirements	18-20
Section-V	Pre-Qualification Criteria	21-22
Section-VI	Form 1 - Tender form	23-25
	Form 2 - Manufacturer's Authorization Form	26
	Form 3 - Bank Guarantee Form for EMD	27
	Form 4 - Bank Guarantee Form for Performance Security	28
	Form 5 - Contract Form	29-32
	Form 6 - Certificate of Supply and Commissioning	33
	Form 7- Indemnity bond for handing over Noise Monitoring Stations (NMS) Including all equipment to the O & M contractor	34-35
	Form-8 (Part-I & Part-II)	36-37
Annexure-I	Instructions to Bidders for online submission of tender	38-40
Annexure-II	Technical Specifications of Equipment/ Instruments for DPCC	41-50
Annexure-III	Operation & maintenance of Noise Monitoring Stations(NMS)	51-54
Annexure-IV	Systematic Diagram of Noise Monitoring Station	55

## Section-I

### NOTICE INVITING TENDER (NIT) THROUGH E-PROCUREMENT

TenderNo.DPCC/LAB(A)/2019/T03.

Dated:-

- 1.1 Delhi pollution Control Committee invites open e-tenders for Supply, Installation, Commissioning, Operation and Maintenance of **Real Time Ambient Noise Monitoring Station Network (NMS)** equipped with Twenty Six(26) nos. of noise monitoring stations and Central Server called the '**Noise Project**'.The Tender Document will be available on website (<http://govtprocurement.delhi.gov.in>) and DPCC web site.
- 1.2 Details of the instrument required, specifications, eligibility and pre-qualifications to bid and instructions on how to bid and other details are available in the Tender Document which can be downloaded from(<http://govtprocurement.delhi.gov.in>) and DPCC web site.
- 1.3 Interested Bidders may download the Tender Documents and submit their Bid online on <http://govtprocurement.delhi.gov.in>.
- 1.4 Earnest Money Deposit (EMD) of Rs. 20 lacs, in the form of Bank Guarantee/DD/FDR in favour of "Delhi Pollution Control Committee" payable at New Delhi, must reach at the address given below on or before the last date of submission of bids . Bidders, however, have to attach scanned copies of EMD along with the Technical bid of their-tender.

Member Secretary,  
Delhi Pollution Control Committee,  
4<sup>th</sup> and 5<sup>th</sup> Floor, ISBT Building,  
Kashmere Gate, Delhi-110006

#### CRITICAL DATE SHEET

Description	Date	Time
Date of Publishing	18.12.2019	
Bid Document Download/Start Date	19.12.2019	
Bid Submission Start Date	21.12.2019	
Bid Submission End Date	02.01.2020	2.00 PM
Technical Bid Opening Date	02.01.2020	3.00 PM
Financial Bid Opening Date	Will be intimated after Technical Evaluation	

- 1.5 The DPCC reserves the right to withdraw, modify and/or cancel the tender without assigning any reasons whatsoever.

**-sd-**  
**SS (Air)**  
**DPCC, Delhi**

## **SECTION - II**

### **INSTRUCTIONS TO BIDDERS**

#### **2.1 Introduction**

**2.1.1** Delhi Pollution Control Committee (DPCC) invites e-tenders from eligible and qualified Bidders for supply, installation, commissioning and operation & maintenance upto 10 years from the date of commissioning of Real Time Ambient Noise Monitoring Network of Delhi Pollution Control Committee as detailed in Section IV “Schedule of Requirements” which meet the pre-qualification criteria, specifications, technical details, quality assurance, etc. as indicated in Section IV & Annexure-II. The whole bid is for single composite package.

#### **2.2 Language of tender**

**2.2.1** The tender and all subsequent correspondences shall be in English. If any literature submitted by the Bidder is any other language, an authenticated English translation thereof shall also be submitted and in such a case, the English translation shall be considered for interpretation of the tender.

#### **2.3 Eligible Bidders**

**2.3.1** Only Bidders who fulfill the pre-qualification criteria specified in Section-V are eligible to apply.

#### **2.4 Tendering Expense**

**2.4.1** The Bidder shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. The DPCC will, in no case be responsible or liable for any such cost, expenditure etc. regardless of the conduct or outcome of the tendering process.

#### **2.5 Amendments to Tender Documents**

- 2.5.1** DPCC may, at any time prior to the deadline for submission of tenders, for any reason, whether at his own initiative or in response to a clarification requested by a potential Bidder, modify the Tender Documents by issuance of Addenda or Corrigenda. They can be downloaded from the DPCC website or <http://govtprocurement.delhi.gov.in>.
- 2.5.2** All such amendments shall be binding on the Bidder. The tender Documents shall be deemed to be amended only by way of the amendments mentioned above. Any other communication issued to the Bidders shall not be construed as an amendment to the Tender Documents.
- 2.5.3** In order to give the potential Bidder reasonable time to prepare their tenders as per the amendment, the DPCC may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

#### **2.6 Documents Comprising the Tender**

**2.6.1** The Tender shall be submitted online in two covers, First cover will contain ‘Technical Bid’ and Second cover will contain ‘Finance Bid’.

**2.6.2** Technical Bid i.e. first cover, shall, *inter alia*, to contain the following:

- a) Scanned copy of Earnest money furnished in accordance with clause 2.13 of Section II or, documentary evidence as per Section II for claiming exemption from payment of earnest money.
- b) Tender Form as per Form-1 of Section VI.

- c) Documentary evidence, establishing that the Bidder is eligible to submit the tender and, also, qualified to perform the contract if it's tender is accepted. The documentary evidence needed to establish the Bidders qualifications shall be:
  - (i) In this tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender. The supplier/ authorized Indian agent/Authorized Representative should have minimum two years continuous agency /partnership/joint venture/participation or collaboration with their principal foreign supplier/OEM. The documentary proof of such agency ship /authorization/MOU should be submitted along with the technical part as per Form - 2 of Section VI in this document. If the bid of the firm does not contain the proof of such nomination/authorization as Indian agent/authorized representative later they said bid will be rejected.
- d) Documents and relevant details to establish that the goods and the allied services to be supplied by the Bidder conform to the requirement of the tender documents. These include documents such as technical data, literature, drawings, etc.
- e) List of equipments offered.
- f) List of manufactures of the equipments offered.
- e) Power of Attorney of firm / resolution of Board of Directors of company for person or persons authorized to sign the Tender;
- f) Power of Attorney / Authorization letter by the Manufacturer to Indian company/ firm/ representative to represent the Manufacturer in India;
- g) Copies of documents defining constitution and legal status of the Bidder;
- h) Documents indicating arrangements with the OEM (if the Bidder is not an OEM itself);
- i) Published annual reports for the last three continuous years showing the turnover and financial results of the Bidder duly certified by the CA. The last three continuous years should start backwards from the financial year ending 31<sup>st</sup> March, 2019.
- j) Documentary proof (Performance Certificate) to show that the Bidder/OEM has supplied the quoted instruments during the past Five years to any Govt. Ministries/Department/Public Sector Undertaking/Scientific Institute of local/International .

**2.6.3** Financial bid in Second Cover shall be submitted on the format prescribed as per Form-8 (Part-I & Part-II). It shall be ensured that Price bid is only submitted online.

**2.6.4** Indication of the bid price in the Technical bid directly or indirectly will render the entire bid invalid.

**2.6.5** A tender, which does not fulfill any of the above requirements and/or gives evasive information / reply against any such requirement, shall be liable to be ignored and rejected.

## **2.7 EVALUATION CRITERIA AND PROCEDURE**

**2.7.1** The bidder who full fill the requirement specified under qualification requirement (SECTION-V) will be short listed

**2.7.2** The detailed techno commercial evaluation to be carried out shall be restricted to these short listed bidders only.

**2.7.3** After completing the techno-commercial evaluation, DPCC will notify the technically qualified bidders and the date of time for opening the financial bids of the technically qualified bidders

## **2.7.4 EVALUATION AND COMPARISON OF FINACIAL BID**

### **Evaluation Procedure**

The DPCC will evaluate the Financial Bids of technically qualified bidders.

The DPCC's evaluation of a bid will take into account the following factors:

- I. Total cost of supply, installation & commissioning at the 26 identified locations at Delhi of the equipments as below:**

### **I. SUPPLY OF THE EQUIPMENT**

1) For goods supplied

- a. Cost of goods off-the-self as per Noise Monitoring Station (NMS) supplied in Delhi-including all duties except GST.
- b. Cost of installation and commissioning
- c. Price of other incidental costs if any,

2) For the Goods/Central server

- a) Cost of Central server at DPCC Headquarter
- b) Commission, Incidental expenses as Networking, Data Communication Equipment and Accessories

**II. COST OF TRANING** : lump sump for Noise Project

**III. QUOTED PRICE (QP) : ( I + II)**

**IV. Total O&M cost (Including insurance) for 10 years as discounted @10 % per anum indicated ( Part- II)- (N)**

**GRAND TOTAL CONTRACT PRICE (III+ IV)**

**NOTE:** Taxes and duties shall not be considered for the purpose of evaluation.

The DPCC will evaluate and compare Bid as a complete package.

### **Illustrative Method of Evaluation:**

(a) NPV of O&M Cost :-

NPV of quoted O&M cost will be calculated as under:

10% will be taken as (N) discounting factor to arrive at the present value of future finance costs to be paid over 10 years towards O & M.

Year No.	Quoted Price of O&M	Present Value	NPV of O&M cost (N)
1st	Q1	PV1=Q1	N=(PV1+PV2+PV3+PV4+PV5+PV6+PV7+PV8 +PV9 +PV10)
2nd	Q2	PV2= Q2/1.1	
3th	Q3	PV3= Q3/(1.1) <sup>2</sup>	
4th	Q4	PV4=Q4/(1.1) <sup>3</sup>	
5th	Q5	PV5= Q5/(1.1) <sup>4</sup>	
6th	Q6	PV6= Q6/(1.1) <sup>5</sup>	
7th	Q7	PV7=Q7/(1.1) <sup>6</sup>	
8th	Q 8	PV8=Q8/(1.1) <sup>7</sup>	
9th	Q 9	PV9=Q9/(1.1) <sup>8</sup>	
10th	Q 10	PV10=Q10/(1.1) <sup>9</sup>	

b) Final Evaluated Price for comparison of Financial Bid=QP+N

c) **Clarification on Financial Bid**

For the purpose of examination, evaluation and comparison of the Financial Bid, the DPPC may at his discretion request the Bidder in writing to clarify his Financial Bid, but no change in the Bid Price or substance of the Bid will be sought, offered or permitted.

d) **Withdrawal for deviations**

Bidders may note that all deviations / variations and additional conditions etc. found in the bid, save those pertaining to any rebates, shall not be given effect to in evaluation and it will be assumed that the bidder complies to all the conditions of Bidding Documents. In case bidder refuses to withdraw, without any cost of the Owner, those deviations, the bid shall be rejected and the bid security of the bidder may be forfeited.

**2.7.5 Tender currencies**

The price of the ‘Noise Project’ shall be quoted in Indian rupees. The prices should be quoted both in figures and in words, in such a way that interpolation is not possible.

**2.8 Contract Price**

2.8.1 The Contract Price of the ‘Noise Project’ shall be firm and fixed and not subject to any variation except in cases where the rate of applicable taxes payable in India or at the place of delivery undergoes a change. The GST shall be paid as per actual. The contract price shall also include the cost of installation and commissioning, insurance, inspection and survey charges, test and trials, delivery, training, operation and maintenance of the noise monitoring network.

2.8.2 If DPCC is required by Indian Law to deduct or withhold any other taxes or other amounts, the gross amount payable by DPCC shall be paid after making such deductions or other withholdings. Necessary certificate for the deductions so made will be issued by the DPCC.

2.8.3 The Contract Price shall not be subjected to any adjustment in respect of rise or fall in the cost of labour, materials, currency rate variation, devaluation or any other matter having implication on the cost of the execution of the Contract and adjustments for subsequent legislation, statute, ordinance, decree, law, regulation that may occur in the country in which the equipment/ instrument is being manufactured.

2.8.4 Further, during the period of delivery systems, in case the supplier delivers equipment/ instrument having same quoted model at less price to any other party (price being the sole consideration in the supply), the contract price will be deemed to have been reduced by the difference between the price offered to the DPCC and the other party. Any difference in the terms of supply shall be duly accounted in the process.

## **2.9 Duties and Taxes**

2.9.1 The Bidder shall pay all outside-India taxes, duties, and levies, lawfully assessed against the DPCC or the Bidder in pursuance of the contract.

2.9.2 The GST paid by the Supplier at the place of delivery in Delhi will be reimbursed as per actual. No claim, on account of increase in cost of the equipment or services due to increase of taxes or duties, will be entertained.

2.9.3 Delhi Pollution Control Committee is a regulatory body under department of Environment, Govt of NCT, Delhi for the implementation of various Pollution Control act and rules and covered under notification 28/2003-customes dated 1/3/2003 where it has been mentioned that "Department & Laboratories of state Govt. or Central Govt. other than hospitals can import goods meant for research only". Head of the institution is empowered to issue the certificate for availing custom duty exemption for research purpose.

## **2.10 Terms and Mode of Payment**

2.10.1 Terms of Payment: Payment will be made only after delivery and satisfactory installation, testing, commissioning, training etc. depending upon the availability of funds and the agencies/contractors shall have no claim in case of delayed payment and no interest will be paid for the delayed payment.

- (i) 80% of the cost of the equipments to be used in the 'Noise Project' will be released on satisfactory supply, installation and commissioning of the items and submission of performance guarantee thereof. 10% of the cost of the equipments to be used in the 'Noise Project' will be released after one year of commissioning and successful operation of the 'Noise Project'. The remaining 10% of the cost of the equipments will be released in two equal installments on completion of second and third years of successful operation of the 'Noise Project'.

2.10.2 No advance payment shall be made.

2.10.3 The payment shall be made in the Indian Rupees.

2.10.4 The Supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, as specified

## **2.11 Indian Agent**



2.11.1 If a foreign Bidder has engaged an Indian agent in connection with its tender, the foreign Bidder, in addition to indicating Indian agent's commission payable by him, if any, shall also furnish the following information:

- a) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
- b) The details of the services to be rendered by the agent for the subject requirement.

## **2.12 Earnest Money Deposit(EMD)**

2.12.1 The earnest money is required to protect the DPCC against the Bidder's withdrawing or altering its bid during the validity period. Hence an EMD amount as specified in Table-I, Section-I must accompany with the tender. EMD is required to be submitted in original separately on or before the last date of submission of bid as per the NIT. Scanned copy of EMD is required to be uploaded along with Technical bid. Bidders, who are currently registered and also will continue to remain registered during the tender validity period with MSME or with National Small Industries Corporation (NSIC), New Delhi are exempted from payment of Earnest money. In case the Bidder falls in these categories, they should furnish certified copy of their registration with these agencies, clearly specifying the details of items for which they are registered.

2.12.2 The earnest money shall be furnished in the form of Bank Guarantee/DD/FDR (format for EMD Bank Guarantee is given in Form-3 of Section VI of this document).

2.12.3 The earnest money shall be valid for a period of 90 days beyond the validity period of the tender.

2.12.4 Unsuccessful Bidder's earnest money will be returned, without any interest, to them not later than 45 days after the expiry of the tender validity period. Successful Bidder's earnest money will be returned without any interest, after receipt of performance security from that Bidder.

2.12.5 Earnest money of a Bidder will be forfeited, if the Bidder withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. The successful Bidder's earnest money will be forfeited if it fails to furnish the required performance security within the specified period.

## **2.13 Tender Validity**

2.13.1 The tender shall remain valid for acceptance for a period of 60 days (Sixty days) from the date of tender opening prescribed in the tender document. Any tender valid for a shorter period shall be treated as non-responsive and rejected.

2.13.2 In exceptional cases, the Bidder may be requested by the DPCC to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by e-mail or fax followed by signed hard copy delivered by hand/post/courier. The Bidders, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly.

2.13.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the DPCC, the tender validity shall automatically be extended up to the next working day.

## **2.14 Instructions on e-tendering**

2.14.1 The Bidders shall submit their tenders in accordance with Annexure-I of this Tender Documents.

## **2.15 Alteration and Withdrawal of Tender**

- 2.15.1 The Bidder, after submitting its tender, is permitted to alter / modify its tender so long as such alterations / modifications are done within the deadline for online submission of tenders. Any alteration/ modification in the tender thereafter is not permitted.
- 2.15.2 No tender can be withdrawn after the deadline for online submission of tender and before expiry of the tender validity period. If a Bidder withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the Bidder in its tender.

## **2.16 Opening of e-Tenders and Scrutiny**

- 2.16.1 The DPCC will open on-line the Technical bids on prescribed date and time. In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the DPCC, the tenders will be opened at the appointed time and place on the next working day.
- 2.16.2 Physical presence of the bidder at the time of opening of tender will not be essential in the e-tendering process. At the appointed time, the bid openers would open the bids online and the details of technical bids offered by the bidders would be known to all on the E Procurement Portal of Delhi Govt.
- 2.16.3 The first cover, i.e. technical bids will be opened online, first and evaluated by the TEC to assess that the goods and services offered are as per the Pre-qualification Criteria, Schedule of Requirements and as per the Technical Specifications.
- 2.16.4 The second cover, i.e. price bids of only technically qualified offers shall be opened online and evaluated.

## **2.17 Preliminary Scrutiny of Tenders**

- 2.17.1 The tenders will first be scrutinized to determine whether they are complete and meet the essential and important requirements viz, pre-qualification criteria, conditions, etc. as prescribed in the Tender Document. The bids, which do not meet the basic requirements, are liable to be treated as non-responsive and rejected.

## **2.18 Discrepancy in Prices**

- 2.18.1 If, in the price structure quoted by a Bidder, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the DPCC feels that the Bidder has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.
- 2.18.2 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail.

## **2.19 DPCC's Right to accept any Tender and to reject any or All Tenders**

- 2.19.1 The DPCC reserves the right to accept in part or in full any tender or reject any tender without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected Bidder or Bidders.

## **2.20 Evaluation and Award Criteria**

- 2.20.1 Separate evaluation of Bids received for each type of tendered equipment/ instrument will be

carried out.

2.20.2 Technical bids will be evaluated on the basis of information and data provided in the bids as well as the actual performance of the equipment/ instruments being offered. Technical bids of the Bidders, who fulfill qualification criteria laid down in Section V, shall be evaluated first in terms of requirements/specifications given in Section IV & Annexure-II of the tender document. If the details/data given in the technical bids are found in conformity with the technical specification prescribed in Annexure- II, testing of the models offered by the Bidders may be carried out by the Tender Evaluation Committee, if required to ascertain the actual performance of the equipment/ instrument. Bidder, will arrange, at his cost, the demonstration of the equipment/instruments.

2.20.3 Price bids of the Bidders, whose technical bids are qualified, shall only be opened.

2.20.4 The lowest Bidder (L1) shall be determined on the basis of evaluation criteria as in para 2.8.4.

## **2.21 Notification of Award**

2.21.1 Before expiry of the tender validity period, the DPCC will notify the successful Bidder online as well as in writing, by registered / speed post or by fax/ telex/cable. The successful Bidder must furnish to the DPCC the performance security within twenty one (21) days from the date of the notification in Form-4 of Section VI (details of the performance security are in clause 3.5 of Section III).

## **2.22 Issue of Contract**

2.22.1 Within twenty one days from the date of the award, the successful Bidder and DPCC shall sign contract on the contract form (Form-5 of Section VI) as per the mutually convenient date.

## **2.23 Non-Receipt of Performance Security and Contract by the DPCC**

2.23.1 If the successful Bidder fails to provide performance security as mention clause 3.5 within the specified time or fails to sign the contract, his EMD will be forfeited and further actions as deemed necessary by the DPCC will be taken against him.

## **2.24 Publication of Tender Result**

2.24.1 The name and address of the successful Bidder(s) receiving the contract(s) will be displayed  
- on the <http://govtprocurement.delhi.gov.in>

2.25 The Supplier shall intimate to the DPCC the anticipated delivery date of the equipment/ instrument, 15 (Fifteen) days in advance of the anticipated date of delivery.

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**SECTION III**  
**GENERAL CONDITIONS OF CONTRACT**

**3.1 Application**

3.1.1 The following General Conditions of Contract shall be applicable for this purchase.

**3.2 Use of contract documents and information**

3.2.1 The Bidder shall not, without the DPCC's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the DPCC in connection therewith, to any person other than the person(s) employed by the Bidder in the performance of the contract emanating from this Tender Document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

3.2.2 The Bidder shall not, without the DPCC's prior written consent, make use of any document or information mentioned in sub-clause 3.2.1 above except for the sole purpose of performing this contract.

3.2.3 Except the contract issued to the Bidder, each and every other document mentioned in sub-clause

3.2.1 Above shall remain the property of the DPCC and, if advised by the DPCC, all copies of all such documents shall be returned to the DPCC on completion of the Supplier's performance and obligations under the contract.

**3.3 Patent Rights**

3.3.1 The Supplier shall, at all times, indemnify and keep indemnified the DPCC, free of cost, against all claims which may arise in respect of goods & services to be provided by the Supplier under the contract for infringement of any right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the DPCC, the DPCC shall notify the Supplier of the same and the Supplier shall, at his own expenses take care of the same for settlement without any liability to the DPCC.

**3.4 Country of Origin**

3.4.1 All goods and services to be supplied and provided under the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

3.4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

**3.5 Performance Security**

3.5.1 Within twenty one days after the issue of notification of award by the DPCC, the Bidder, shall furnish performance security to the DPCC for an amount equal to ten per cent of the total value of the contract. This Security shall remain valid up to 90 days after the date of completion of all contractual obligations by the Supplier including the operation and maintenance period upto 10 years.

3.5.2 The Performance security shall be in the form of Bank Guarantee issued by a

Scheduled bank in India, in the prescribed form as provided in Form-4 of Section VI of this document.

- 3.5.3 If Bidder fails to fulfill its obligations in terms of the contract, the amount of the performance security shall be payable to the DPCC as compensation and the DPCC can invoke the said Performance Bank Guarantee.

### **3.6 Technical Specifications and Standards**

- 3.6.1 The Scientific Instruments /Equipments to be provided by the Supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' under Annexure-II of this document.

### **3.7 Packing and Marking**

- 3.7.1 The Bidder should pack the goods in strong and durable packing which can withstand, without limitation, the entire journey during transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

### **3.8 Enquiry, Inspection and Quality Control**

- 3.8.1 The DPCC and/ or its nominated representative(s), in order to satisfy itself, may enquire, inspect and/or test the ordered goods and the related services to confirm their conformity to the tender qualification criteria, specifications and other quality control details incorporated in the tender/contract at the cost of the DPCC.
- 3.8.2 The equipment must fulfill all legal regulations on safety and health requirements (radiation, electrical, electro-magnetic, mechanical, etc.) and shall comply with the Electricity Acts, Rules, Codes& Standards as existing in India.

### **3.9 Terms of Delivery**

- 3.9.1 The bidder/his authorized representative to quote the prices in Indian Rupee basis. The Indian agent/authorized representative will arrange the custom clearance from the customs and arrange delivery to the DPCC. The DPCC will provide the concessional custom duty exemption certificate and other required documents.
- 3.9.2 The bidder to quote the prices on FOR Destination (DPCC, Delhi) Basis. Delhi Pollution Control Committee is a regulatory body under department of Environment, Govt of NCT, Delhi for the implementation of various Pollution Control act and rules and covered under notification 28/2003-customes dated 1/3/2003 where it has been mentioned that "Department & Laboratories of state Govt or Central Govt other than hospitals can import goods meant for research only". Head of the institution is empowered to issue the certificate for availing duty exemption for research purpose.
- 3.9.3 The incidental expenses towards sending the instruments to the designated locations, such as arranging transport, insurance, labour, including charges to the custom clearing agent etc. to be borne by the supplier/their authorized Indian representative. The Indian agent/ their representatives should be responsible for the safety of the instruments during the transit from airports to the designated locations.

### **3.10 Insurance**

3.10.1 The Supplier shall, in his own interest, insure the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The Supplier shall be responsible till the entire stores contracted for arrive in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured. The insurance cover shall be obtained by the Supplier in its own name and not in the name of the DPCC or its Consignee.

### **3.11 Clearance / Receipt of Goods**

3.11.1 The Supplier shall make his own arrangements for clearance of goods through customs and their receipt and onward dispatch for the site of installation after obtaining the necessary custom exemption certificate from the DPCC.

### **3.12 Warranty**

3.12.1 Bidders must give the warranty of at least three years (36 months) from the date of successful commissioning of Equipment and also give the warranty declaration that “everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specification and shall be complete enough to carry out the experiments, as specified in the tender document”.

3.12.2 In case of any claim arising out of this warranty, the DPCC shall promptly notify the same in writing to the Supplier. Upon receipt of such notice, the Supplier shall, with all reasonable speed and within the time period prescribed in clause 4.9 of Section IV, repair / replace the defective goods or parts thereof, free of cost, at the ultimate destination. The Supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the DPCC for such replaced parts/goods thereafter.

3.12.3 If the Supplier, having been notified, fails to rectify/replace the defect(s) within a reasonable period the DPCC may proceed to take such remedial action(s) as deemed fit by the DPCC, at the risk and expense of the Supplier and without prejudice to other contractual rights and remedies, which the DPCC may have against the Supplier.

### **3.13 Assignment**

3.13.1 The Supplier shall not assign to anyone, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the DPCC's prior written permission.

### **3.14 Sub-contracts**

3.14.1 The Supplier shall notify the DPCC in writing of all sub-contracts awarded under the contract. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

3.14.2 Sub-contract shall be only for bought out items, sub-assemblies & maintenance of goods and for the goods as a whole.

3.14.3 Sub-contracts shall also comply with the provisions of Clause 3.4 (“Country of Origin”).

### **3.15 Delay in the Supplier's performance**

- 3.15.1 The Supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the DPCC in the Schedule of Requirements and as incorporated in the contract.
- 3.15.2 Subject to the Force Majeure provision under clause 3.17 of this section, any unexcused delay by the Supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the Supplier liable to any or all of the following sanctions:
- i) Imposition of liquidated damages,
  - ii) Forfeiture of its performance security and
  - iii) Termination of the contract for default.
- 3.15.3 If at any time during the currency of the contract, the Supplier encounters conditions hindering timely delivery of the goods and performance of services, the Supplier shall promptly inform the DPCC in writing about the same and its likely duration and make a request to the DPCC for extension of the delivery schedule accordingly. On receiving the Supplier's communication, the DPCC shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of Supplier's contractual obligations by issuing an amendment to the contract.

### **3.16 Liquidated damages**

- 3.16.1 Subject to Clause 3.17 of this Section (Force Majeure), if the Supplier fails to complete the installation and commissioning of the equipment within the time fixed under the contract, the DPCC shall without prejudice to any other rights and / or remedy as may be available to the DPCC under the Contract, shall deduct from the Contract price as an agreed Liquidated damages amount @ 1% of value of undelivered goods per week or part thereof until actual delivery or performance, subject to a maximum of 10% of the contract price.
- 3.16.2 If the delay exceeds 30 (Thirty) days from the scheduled date of supply, installation and commissioning of the 'Noise Project', the DPCC shall have the right to terminate the contract at the risk and cost of the Supplier.
- 3.16.3 The amount of Liquidated damages may be adjusted or set-off against any sum payable to the Supplier under this or any other contract with the DPCC.

### **Termination for default and insolvency**

- 3.16.4 The DPCC may, without prejudice to any other contractual rights and remedies available to it (the DPCC), by written notice of default sent to the Supplier, terminate the contract in whole or in part, if the Supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the DPCC.
- 3.16.5 If the Supplier becomes bankrupt or otherwise insolvent, the DPCC reserves the right to terminate the contract at any time, by serving written notice to the Supplier without any compensation, whatsoever, to the Supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the DPCC.

### **3.17 Force Majeure**

3.17.1 Vendor shall not be considered in default if delay in delivery occurs due to causes beyond his control such as acts of God, natural calamities, civil, wars, strikes, fire, floods, riots and acts of usurped power. Only those causes which have a duration of more than 7 calendar days shall be considered cause of force majeure. A notification to this effect duly certified by the Local Chamber of Commerce/Statutory Authorities shall be given by the Vendor to the buyer by registered letter. In the event of delay due to such cases a length of time equal to the period of force majeure or at the option of the buyer, the order may be cancelled. Such cancellation would be without any liability whatsoever on the part of buyer. In the event of such cancellation the vendor shall refund any amount advanced by the DPCC and deliver back any material issued to him by the DPCC and release facilities, if any, provided by the DPCC.

### **3.18 Resolution of disputes**

3.18.1 In the event of any dispute or difference(s) between the parties hereto, such disputes or differences should be resolved amicably by mutual consultation. If such resolution is not possible, then the unresolved dispute or differences shall be referred to arbitration of sole arbitrator, to be appointed by the Chairman, DPCC. The provisions of Arbitration & Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall be applicable to arbitration. The venue of such arbitration shall be at Delhi. The Language of arbitration proceedings shall be in English. The arbitrator shall make a written & reasoned award (the "Award") which shall be final & binding on the parties. The cost of arbitration shall be shared equally by the parties to the agreement. However, expenses incurred by each party in connection with the preparation presentation shall be borne by the party itself. It will not be an objection to any such appointment that the arbitrator are the government servant and had any interest in the board or the contract entered into directly or indirectly.

### **3.19 Applicable Law and Jurisdiction**

3.19.1 The contract shall be governed by the laws of India for the time being in force. The court of Delhi, India shall be exclusive jurisdiction in all matters or disputes arising under or in respect of this Contract.

### **3.20 Injury and Damage**

3.20.1 Injury or Death of Persons - The Supplier shall be liable for and shall indemnify the DPCC against any liability, loss claim or proceedings whatsoever arising under any statute or law in respect of personal injury death or any disability caused by the carrying out the Works unless due to any act or neglect of the DPCC, or of any person for whom the DPCC is responsible.

3.20.2 Damage to Property - The Supplier shall be liable for and indemnify the Board against and insure and cause any Manufacturers and subcontractors to insure against any expense, liability, loss claim or proceedings in respect of any damage whatsoever to any real or personal property for any one occurrence in so far as such damage arises out of or in the course of or by reason of the carrying out of the Works and is due to any negligence, omission or default of the Supplier or any person for whom the supplier is responsible or any Manufacturers and subcontractors or person whom the Manufacturers and subcontractors are responsible.

3.20.3 Fall Clause



The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.

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## **SECTION IV**

### **SCHEDULE OF REQUIREMENTS**

#### **4.1 Scope of Work for the ‘Noise Project’:**

- i) Supply of Equipment/ Instrument (with essential accessories, spares, consumables, etc.), including site works (related to installation, as required), and installation & commissioning of the Network;
- ii) Supply, installation and commissioning of Central Server as part of ‘Noise Project’ at DPCC office.
- iii) Bidder is required to supply one stand by system to reduce the down-time of station.
- iv) Daily reporting of data on-line pertaining to noise level to DPCC/CPCB as per schedule of requirement.
- v) Operation & Maintenance for the period of 10 years including supply of spare parts, consumables and transfer of Data at DPCC/CPCB Central Receiving Station, and provide a fully trained Data Analyst to manage Noise Monitoring data at DPCC office and dedicated maintenance team of 5 persons.
- vi) Obtaining regulatory/statutory clearances, as necessary, and Training of staff of DPCC;

#### **4.2 Delivery Schedule**

4.2.1 Equipments/ Instruments including Central Server under the ‘Noise Project’ shall be supplied, Installed and commissioned within 60 (Sixty) days.

#### **4.3 Terms of Delivery**

4.3.1 Any loss or damage to the equipment due to mishandling, transportation, till such time the equipment is delivered at the site shall be to Bidder’s account. The Bidder shall be responsible for preferring of all claims and make good for the damage of loss by way of repairs and/or replacement of the portion of equipment damaged or lost.

4.3.2 Upkeep of the Equipment/ Instrument till the time of their commissioning and delivery shall be the responsibility of the Bidder. No extra cost for upkeep of machine shall be payable to the supplier if the commissioning of the machine at particular destination(s) is delayed for reasons not attributable to the Govt.

4.3.3 The Successful Bidder shall be responsible to ensure the following:-

- i) Sound packing of the items.
- ii) Shipment of the items
- iii) Insurance
- iv) Custom clearance and handling of items at port of entry in India or in the place of Installation, if any.
- v) Forwarding and transshipment of items up to the destination.
- vi) Insurance for inland transportation and payment of duties.
- vii) Receipt of equipment at the site.
- viii) Installation & commissioning of equipment at the site. (This includes all requisite site works.)
- ix) Software up-gradation during the entire operation and maintenance period upto 10 years from the date of commissioning.

#### 4.4 Locations for Commissioning

4.4.1 Locations for Supply of Equipment/ Instrument shall be as per the table given hereunder:

##### Locations of Delivery of the Instruments / Equipments

S. No.	Item Code	Instrument / Equipment	Quantity Required	Locations
1.	CB-03	Real Time Ambient Noise Monitoring Network	26	Actual locations in Delhi shall be informed after finalization of competent authority.

#### 4.5 Operation and maintenance details as per annexure III.

#### 4.6 Facilities by the DPCC

4.6.1 DPCC will provide site location and documents related to electric connection. The electric connection will be in the name of DPCC. All other provisions for the electric connection, installation, commissioning and operation of the equipment/ instruments shall be made by the Supplier.

4.6.2 The bidder will provide the panel board for housing of UPS, Battery and electric meter. The drawing for the installation of these equipments shall be provided by the bidder for the approval of DPCC.

#### 4.7 Site Restrictions

4.7.2 Supplier and his employees shall not trespass beyond the boundary limits of the site on to any adjoining area and the Supplier shall take necessary action to prevent trespassing and shall follow all security regulations and access control as enforced at site by the concerned office/ government authorities or their representatives in regard to men & material movement.

#### 4.8 Product Support / Long Term availability of Spares

4.8.1 The Bidder must submit an undertaking from the OEM of the noise monitoring system to give product support for at least 10 years.

4.8.2 The Bidder shall provide a part catalogue covering complete range of spares/components / consumables for the Equipment / Instruments and support structure.

4.8.3 Comprehensive list of spares shall be indicated in the Technical bid. Bidder shall also provide recommended list of critical spares and test equipment for at least 10 years of trouble free operation and maintenance.

#### 4.9 Software and Software Upgrades

4.9.1 The Supplier shall agree to provide copies of as -built software in executable code that are installed in the system at all levels. It shall also state the Hardware that needs to be in place for implementation ensuring that the Equipment/ Instrument un-availability is minimal. The Supplier shall also comply and guarantee software upgrades for the service life of the Equipment/Instrument.

4.9.2 Taking into account the operational requirements of the DPCC, there may be a need to customize some portion of the software. Supplier should agree for such customization, which is expected to be limited, at no extra cost.

4.9.3 Any software upgrades developed by the Supplier during the warranty and the post warranty period should be made available to the DPCC at no extra cost and should be delivered and installed in a prompt and efficient manner. The Supplier should install and train the operator with software upgrades.

#### **4.10 Training of Staff**

**4.10.1 Training is to be provided in the operation & general upkeep of the equipment/ instrument after installation & commissioning at the site. Training should also be imparted on sample analysis. Standard operating procedure (SOP) for the equipment/ instrument should be prepared and provided to the DPCC's staff at site.**

4.10.2. Bidder shall train 2 to 4 persons during warranty. The cost for providing such training shall be deemed to have been included within the cost quoted.

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**SECTION – V**  
**Pre-Qualification Criteria**

**Bidders who can bid.**

- 5.1 Only those bidders who fulfill the following eligibility as well as the qualifications criteria can submit tenders.

**ELIGIBILITY**

- 5.2 To be eligible, the Bidder should have not been banned or suspended from Government transactions due to any reason including corrupt and fraudulent practices.

**QUALIFICATION**

- 5.3 Original Equipment Manufacturers (OEM) may bid directly. OEM should be internationally/nationally reputed manufacturer/branded company.

OR

- 5.4 An authorised agency/representative nominated by the OEM, who have minimum two years continuous agreement with OEM, may also bid. Relevant documents along-with tender specified Authorization Form indicating the Bidder is an authorised agency/representative of the OEM for bid submission shall be enclosed with tender bid. The OEM shall give an undertaking to supply components / parts/ consumables during warranty & post-warranty periods as well as continued supply of components/ spare parts for the period of product support. OEM shall also assure full technical back-up and support in the matter of providing maintenance including software up-gradations. Copy of agreement between OEM and the agency/representative confirming the above requirements and nomination from the OEM for supplying stores shall be enclosed with the tender. Only one nomination from the OEM shall be accepted. The order will be issued in the name of successful bidder.
- 5.5 Average annual turnover of the Bidder should be at least 6 Crore, during last three financial years i.e. April 2016 to March 2019. Certified and published annual audit reports of the past three years are to be submitted along with the tender.
- 5.6 The Bidder/OEM should have supplied at least ten (10) numbers of the quoted/similar Equipment/Instrument in the last two years to Govt. Ministries/Department/Public Sector Undertaking/Scientific Institutes - India or International. The DPCC and/ or its nominated representative(s), in order to satisfy itself, may enquire the performance of similarly supplied goods from other Govt or Private users. The user may also inspect and/or test the quoted/ordered goods and the related services to confirm their conformity to the tender qualification criteria, specifications and other quality control details incorporated in the tender/contract at the cost of the DPCC.
- 5.7 Only one bid will be accepted from OEM or through authorised agency/representative nominated by OEM for any type of equipment/ instrument. In case if more than one bid for any type of equipment/ instrument is received from OEM or through authorised agency/representative nominated by OEM, all such bids shall be summarily rejected.
- 5.8 Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting

- documents etc. may lead to rejection of the bid.
- 5.9 Furnishing of wrong/ambiguous information in the compliance statement may lead to rejection of bid and further black-listing of the bidder, if prima-facie it appears that the information in the compliance statement was given with a malafide/fraudulent intent.

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**SECTION - VI**  
**Form - 1**  
**TENDER ACCEPTANCE FORM**

*(To be submitted on Letter Head)*

(e-Tender No. C-47011/ICB/01/2019-20/Mat.)

Having carefully gone through the whole Tender Document, we, M/s. \_\_\_\_\_, the Bidder, agree to all the terms and conditions mentioned in them and hereby, make the following offer to supply the Instruments/Equipments as per the Schedule requirements, delivery schedule and in conformity with all other conditions in the Tender Documents and amendments. We will arrange for demonstration of models of the Equipment/ Instrument being offered, within India as per the convenience of the DPCC.

**Bidder**

1. Name of the Bidder \_\_\_\_\_
2. Address \_\_\_\_\_
3. Email \_\_\_\_\_
4. Phone \_\_\_\_\_ Fax \_\_\_\_\_
5. Income Tax Permanent Account Number(PAN): \_\_\_\_\_
6. GST Registration Number : \_\_\_\_\_
7. Name and complete address of the Bidder's bankers \_\_\_\_\_
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
8. Name and designation of the person digitally signing and submitting the tender \_\_\_\_\_
9. Is the person digitally signing and submitting the tender authorised by the Bidder? (Yes/No)  
*(Please enclose scanned copy of the Board's resolution authorising the person to submit the bids without which the tender will be rejected)*
10. Whether business dealings with the Bidder currently stand suspended/ banned by any Ministry/ Department of Govt. of India or any State Govt.(Yes/No)

**Qualification**

11. Is the Bidder an OEM of the goods being offered? Yes/No
12. Is the Bidder an authorized agency / representative duly nominated by the OEM?(Yes/No) *(If yes, please enclose required documents as mentioned in qualification criteria)*

**Offer**

13. Make & Model Number of the Equipment/ Instrument offered \_\_\_\_\_

**Technical documents to be enclosed**

14. Technical Literature/brochure of the item quoted and Clause-wise response/compliance to requirements specified in *Annexure-II* of Tender Document. You may furnish additional information/ clarifications, documents, etc., in support of your offer.

### Operation & Maintenance:

15. Do you have your own set up in India to provide the operation & maintenance?  
(Yes/No)
16. If yes, please provide details including experienced manpower & resources details and enclose relevant documents
- 
- 
- 

17. If answer to question at 14 above is no, do you have any agreement with any other manufacturer or reputed agency to act as Maintenance contractor to provide maintenance during warranty and post warranty period?(Yes/No)
18. If answer to question 16 above is yes, please provide details and enclose a copy of the agreement, including previous experience and manpower details of the proposed agency in maintenance of similar type of equipment/instruments.

### Availability of Spares and Consumables for 10 years of trouble-free operation and maintenance

19. Does the OEM/Its Authorised representative agree to provide Spares and Consumable for 10 years of trouble-free operation and maintenance?(Yes/No)

### After Sales Services/Post Contractual Support

20. Does the OEM/Its Authorized representative agree to provide After Sales Services/ post contractual support i.e. repair, maintenance, supply of spares parts etc? (Yes/No)

### Documents to be enclosed

21. Have you submitted the EMD as prescribed in Tender Document (Table-I) or EMD Exemption Certificate?(Yes/No)
22. Have you enclosed the following documents?(Yes/No)
- Scanned copy of the EMD/EMD Exemption Certificate?(Yes/No)
  - Tender Acceptance Form as specified in the Tender?(Yes/No)
  - Documents and relevant details to establish that the goods offered conform to the requirement of the tender documents and Technical Literature/Brochure etc.(Yes/No)
  - Power of Attorney of firm / resolution of Board of Directors of company for person or persons authorized to sign the Tender;(Yes/No)
  - Authorization letter by the OEM (Manufacturer) or self declaration letter by OEM (if OEM is bidding);(Yes/No)
  - Copies of documents defining constitution and legal status of the Bidder;(Yes/No)
  - GST Registration Certificate and latest GST Deposit receipt (in case of Indian Bidder) (Yes/No)?
  - An undertaking to the effect that the Price bid does not contain any conditions/options whatsoever of the price demanded for sale.(Yes/No)
  - Certificate for non-blacklisting of firm and non-registration of criminal case?(Yes/No)
  - Certified published annual reports showing the turnover and financial results.(Yes/No)
  - Performance certificates (min. two) for the offered equipment/ instruments from



Govt Ministries/Department/Public Sector Undertaking/Scientific Institute of Local or International.(Yes/No).

- k. List of Spare and Consumables required for 10 years trouble free operation and maintenance alongwith a certificate that Spares & Consumables will be provided for at least 10 years.(Yes/No)
  - l. Duly Signed and stamped Integrity Pact(Yes/No)
  - m. Any other documents that you consider necessary to strengthen your bid. (Yes/No/None required)
- 

..... (Signature with date)

..... (Name and designation)

Duly authorised to sign tender for and on behalf of

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MANUFACTURER’S AUTHORISATION FORM

To

.....  
.....

(Name and address of the DPCC)

Dear Sirs,

Ref. Your Tender Document No....., dated .....

We ....., who are proven and  
reputable manufacturers of  
..... (name and description of the goods offered in the tender) having factories at  
....., hereby authorize M/s.....(name and address of the agent)to  
submit a tender, process the same further and enter into a contract with you against your requirement as  
contained in the above referred Tender Documents for the above goods manufactured by  
us.M/s

..... (name and address of the agent)is having..... years’ agreement/association  
with us since .....

We further confirm that no Supplier or firm or individual other than M/s  
..... (name and address of the above agent) is authorised to submit  
a tender, process the same further and enter into a contract with you against your requirement as  
contained in the above referred Tender Documents for the above goods manufactured by us.

We also hereby extend our full comprehensive warranty, as applicable as per the General  
Conditions of Contract, for the Scientific Instruments/Equipments offered for supply by the above  
firm against this Tender Document.

Yours faithfully,

.....  
.....

[Signature with date, name and designation]

for and on behalf of M/s .....

[Name & address of the manufacturers]

Note : This letter of authorisation should be on the letter head of the manufacturing firm and  
should be signed by a person competent and having the power of attorney to legally bind  
the manufacturer.

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**BANK GUARANTEE FORM FOR EMD**

Whereas..... (hereinafter called the “Bidder”) has submitted its quotation dated..... for the supply of .....(hereinafter called the “tender”) against the DPCC’s tender enquiry No. .... Know all persons by these presents that we ..... of ..... (hereinafter called the “Bank”) having our registered office at.....are bound unto ..... (hereinafter called the “DPCC) in the sum of ..... for which payment will and truly to be made to the said DPCC, 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 or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the Bidder having been notified of the acceptance of his tender by the DPCC during the period of its validity:-
  - a) fails or refuses to furnish the performance security for the due performance of the contract or
  - b) fails or refuses to accept or execute the contract.

We hereby irrevocably and absolutely undertake to pay immediately the DPCC up to the above amount upon receipt of its first written demand, without the DPCC having to substantiate its demand, provided that in its demand the DPCC will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of forty five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

This guarantee will not be discharged due to change in the constitution of the bank or the Bidder.

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

.....  
Name and designation of the officer  
.....

Seal, name & address of the Bank and address of the Branch

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**BANK GUARANTEE FORM FOR PERFORMANCE SECURITY**

The Member Secretary  
Delhi Pollution Control Committee  
4<sup>th</sup>&5<sup>th</sup>Floor,ISBT building, Kashmere Gate , Delhi-110006

WHEREAS ..... (name and address of the Supplier) (hereinafter called “the Supplier”) has undertaken, in pursuance of contract no.....dated.....to supply (description of goods and services)(hereinafter called “the contract”).

AND WHEREAS it has been stipulated by you in the said contract that the Supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with and due performance of the contract;

AND WHEREAS we have agreed to give the Supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the Supplier, up to a total of ..... (amount of the guarantee in words and figures), and we hereby irrevocably and absolutely undertake to pay you immediately, upon your first written demand declaring the Supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the Supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

The Bank guarantee shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this Bank Guarantee has been established in such form and with such content that is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

The Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank or the Supplier.

The Bank further undertakes not to revoke this Guarantee during its currency except with the previous express consent of the DPCC in writing.

The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Guarantee for an on behalf of the Bank.

This guarantee shall be valid upto and including the .....day of ....., 20.....

.....  
(Signature with date of the authorised officer of the Bank)

.....  
Name and designation of the officer

.....  
Seal, name & address of the Bank and address of the Branch

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Form – 5  
CONTRACT FORM

CONTRACT FOR SUPPLY, INSTALLATION AND COMMISSIONING  
OF EQUIPMENT/INSTRUMENTS TO DPCC

Contract No. \_\_\_\_\_ dated \_\_\_\_\_

This contract for \_\_\_\_\_ is made on this day of 2019 between [hereinafter referred to as “Supplier”] on the one part and the Delhi Pollution Control Committee, 4<sup>th</sup> and 5<sup>th</sup> Floor, ISBT Building, Kashmere Gate, Delhi-110006 (hereafter referred to as the “DPCC” which shall include his successors in the office and assigns) on the other part.

2. Whereas the DPCC had floated a Tender No. DPCC/LAB(A)/2019/T03 dated \_\_\_\_\_ and \_\_\_\_\_ the Supplier had submitted tender in response and has been awarded the contract vide Notification of award/Purchase Order No. \_\_\_\_\_ dated \_\_\_\_\_, it is hereby, agreed that the Supplier will supply, commission Equipment / Instruments as per Tender No. DPCC/LAB(A)/2019/T03 dated \_\_\_\_\_. And will provide operation & maintenance and also provide product support for at least 10 years from the date of commissioning on the terms and conditions.

3. The following documents shall be deemed to form and be read and construed as part of this contract:

- (i) DPCC’s Tender No. DPCC/LAB(A)/2019/T03 dated \_\_\_\_\_
- (ii) Bidder’s Technical bid dated \_\_\_\_\_
- (iii) Price bid of the Bidder
- (iv) General Instructions of the Contract, General Conditions of Contract, Schedule of Requirements, Technical Specifications, Quality Control Requirements, Qualification Criteria as mentioned in Tender No. DPCC/LAB(A)/2019/T03 dated \_\_\_\_\_
- (v) Manufacturers’ Authorisation Form furnished by the Bidder in its tender
- (vi) DPCC’s Notification of Award F.No. \_\_\_\_\_ dated \_\_\_\_\_.

Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under Section II - ‘Instructions to Bidders’ of the DPCC’s Tender Document shall also apply to this contract.

4. In addition to above documents, following shall also be deemed to form and be read and construed as part of this contract:

- a) Supplier’s letter No. \_\_\_\_\_ dated \_\_\_\_\_
- b) DPCC’s letter F.No. \_\_\_\_\_ dated \_\_\_\_\_

(Reference of all correspondence made with the Supplier with respect to this procurement)

5. Brief particulars of the goods and services which shall be supplied by the Supplier are as under:

Brief description of goods / Services	Quantity to be supplied	Unit Price	Total price	Terms of delivery

However during the period of contract for delivery of Equipment/Instruments, in case the Supplier delivers the Equipment/Instruments of identical specifications at a less price to any other party (price being the sole consideration in the supply), the contract price will be deemed to have been reduced by the difference between the price offered to the DPCC and to the other party. Any difference in the terms of supply shall be duly accounted in the process.

6. Product Support

The Supplier shall provide Operation and Maintenance for 10 years from the date of the commissioning and would be governed by the clause 4.7 of Section-IV of Tender No. DPCC/LAB(A)/2019/T03dated

7. Delivery schedule

Commissioning / handing over of.....Equipment/Instruments shall be completed within \_\_\_\_\_months from the date of Letter of award of the Contract and would be governed as per **clause 4.2 Section IV** of Tender No. DPCC/LAB(A)/2019/T03dated \_\_\_\_\_  
There after on \_\_\_\_( if any).

8. Performance Security issued

The Supplier will furnish Performance Security within 21 days after the issue of Notification of award by the DPCC as per clause 3.5 of Section-III of Tender No. DPCC/LAB(A)/2019/T03 dated\_.

9. Technical Specification

Technical specification of the\_\_Equipment/Instruments shall be as per Annexure-II of the Tender No. DPCC/LAB(A)/2019/T03 dated\_\_\_\_\_

10. Transportation and Insurance

Transportation and Insurance of the Equipment/Instruments shall be as per clause 3.9 & 3.10 of Section-III of Tender No. DPCC/LAB(A)/2019/T03dated\_\_

11. Quality Control

The quality control, inspection, tests and trials shall be carried out as per terms & conditions mentioned in Tender No. DPCC/LAB(A)/2019/T03dated\_\_

12. Installation &Commissioning

Installation & Commissioning of the Equipment/Instruments will be carried out as per Tender No. DPCC/LAB(A)/2019/T03dated\_.

13. Payment Terms

The term and mode of payment, as provided in clause 2.13 of Section II of Tender No. DPCC/LAB(A)/2019/T03dated\_ shall be asunder:

Payment will generally be made only after delivery and satisfactory installation, testing, commissioning, training etc and the agencies/contractors shall have no claim in case of delayed payment and no interest will be paid for the delayed payment.

- (i) 80% of the cost of the equipments to be used in the ‘**Noise Project**’ will be released on satisfactory supply, installation and commissioning of the items and submission of performance guarantee thereof. 10% of the cost of the equipments to be used in the ‘**Noise Project**’ will be released after one year of commissioning and successful operation of the ‘**Noise Project**’. The remaining 10% of the cost of the equipments will be released in two equal installments on completion of second and third years of successful operation of the ‘**Noise Project**’

The Supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, as specified. While claiming payment, the Supplier shall certify on the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the Supplier for claiming that payment have been fulfilled as required under the contract. In case the machine is not attended to in respect to any defect developing during the Operation and Maintenance period and made functional, 10% Performance security deposit shall be forfeited.

14. Liquidated Damages

If the Supplier fails to complete the installation and commissioning of the equipment within the time fixed under the contract, the DPCC shall deduct Liquidated Damages as per clause 3.16 of Section III of Tender No. DPCC/LAB(A)/2019/T03dated\_\_\_\_\_

15. Termination of Contract

The Contract can be terminated in accordance with clause 3.17 of Section III of Tender No. DPCC/LAB(A)/2019/T03dated \_\_\_\_\_

16. Resolution of Disputes

In the event of any dispute or difference arise between the DPCC and Supplier in connection with or relating to the contract, the parties shall resolve their disputes or differences as per clause 3.18 & 3.19 of Section III of Tender No. DPCC/LAB(A)/2019/T03dated\_\_

17. Training

The training of the staff shall be carried out as laid down in clause 4.10 of Section IV of Tender No. DPCC/LAB(A)/2019/T03dated \_\_\_\_\_

18. Modification of Contract

If necessary, the DPCC may, by a written order given to the Supplier at any time during the currency of the contract, amend this contract.

19. Performance Guarantee

The supplier will be required to furnish a Performance Guarantee by way of Bank Guarantee within 21 days of signing of contract through a public sector bank for a sum of Rs. i.e. equal to 10% of the Purchase Order value. Performance Bank Guarantee should be valid upto 60 days beyond the end date of contract.

20. Miscellaneous

Other issues, not mentioned in the contract, shall be governed as per the Tender No. DPCC/LAB(A)/2019/T03dated\_\_\_\_\_and documents mentioned in paragraph 3 & 4 above.

Received and accepted this contract.

(\_\_\_\_\_

M/s \_\_\_\_\_

(Sign & Stamp of

Supplier) Date: \_\_

Place: \_\_\_\_\_

WITNESSES:

(\_\_\_\_\_

\_\_\_\_\_

For Delhi Pollution Control Committee

\*\*\*\*\*



**CERTIFICATE OF SUPPLY, INSTALLATION & COMMISSIONING**

F.No. \_\_\_\_\_

Dated \_\_\_\_\_

1. Reference P.O.No. \_\_\_\_\_ date
2. It is certified that
  - (a) M/s \_\_\_\_\_ have completed the Supply, and Commissioning of the EQUIPMENT /INSTRUMENTS Model\_\_\_\_Serial No.\_\_\_\_\_ on \_\_\_\_\_(date) at designated site \_\_\_\_\_(name of the site).
  - b) The process of handing / taking over of the aforesaid system, accessories and services specified in the Contract to the satisfaction of the DPCC, has been completed on \_\_\_\_\_(date).
  - c) The aforementioned EQUIPMENT / INSTRUMENTS worked satisfactorily during the trial period of 15 days starting w.e.f. \_\_\_\_\_(date)to\_(date).

For Contractor

For DPCC

Witness:

Witness:

Signature  
Name  
Designation  
Address  
Date

Signature  
Name  
Designation  
Address  
Date

\*\*\*\*\*

**Form- 7**

**INDEMNITY BOND FOR HANDING OVER NOISE MONITORING STATIONS (NMS)  
INCLUDING ALL EQUIPMENT TO THE O&M CONTRACTOR**

This Indemnity Bond is made this.....Day of 2020.....by.....a Company registered under the Companies Act,1956/Partnership firm/Proprietary concern having its registered office at.....(hereinafter called as “Contractor” or“ obligator” which expression shall include its successors and permitted assigns)in favor of **DPCC** with Office at-----, which term shall include permitted assigns and successors, (hereinafter called “DPCC” which expression shall include its successors and assigns).

Whereas DPCC has awarded to the Contractor , a contract for O&M of the 26 nos. of NMS located at-----, vide its Letter of Intent/Award Letter/Contract No.....dated.....(hereinafter called the “Contract”), in the terms of which Contractor shall be responsible for the Equipments to be handed over to it by DPCC for the purpose of performance of the Contract (herein after called the “Equipments”).

Now, therefore this Indemnity Bond witnessed as follows:

1. That inconsideration of various Equipments as mentioned in the Contract, valued at Rs.-- (Rupees.....) to be handed over to the Contractor for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep DPCC indemnified, for the full value of the Equipment. The Contractor hereby acknowledges receipt of the Equipments as per details in the Schedule appended hereto.
2. That the Contractor is obliged and shall remain absolutely responsible for the safe custody of the Equipments at Noise Monitoring Stations(NMS) belonging to DPCC against all risks whatsoever till the Equipments are duly used in accordance with all terms of the Contract. The Contractor undertakes to keep DPCC harmless against any loss or damage that may because to the Equipment.
3. The Contractor undertakes that the Equipments shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the Equipments shall be utilized for any other work or purpose what so ever.It is clearly understood by the Contractor that non-observance of the obligation under this Indemnity Bond by the Contractor or shall inter-alia constitute a criminal breach of trust on the part of the Contractor or for all intents and purposes including legal/penal consequences.
4. That DPCC is and shall remain the exclusive Owner of the Equipment free from all encumbrances, charges or liens of any kind, whatsoever. The Equipments shall at all times be open to inspection and checking by Project-in-Charge DPCC shall always be free at all time to take possession of the Equipments in whatever form the Equipments may be. If in its opinion, the Equipments are likely to been endangered, misutilised or converted to uses other than those specified in the Contract, by any act of omission or commission on the part of the Contractor; he find itself and under takes to comply with

The direction or demand of DPCC to return the Equipments with out any demur or reservation.

5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipments or the same or any part thereof is misutilised in any manner whatsoever then the Contract or here by agrees that the decision of the Project-in-Charge of DPCC as to assessment of loss or damage to the Equipments shall be final and binding on the Contractor. The Contract or bind sit self and undertakes to replace the lost and/or damaged Equipments at it neither sow nor remedy that may be available to DPCC against the Contract or under the Contract and under this Indemnity Bond.
6. Now the conditio n of this Bond is that if the Contract or shall duly and punctually complies with the terms and conditions of this bond to the satisfaction of DPCC,then the above bond shall be void, but other wise, it shall remaining full force and virtue.

In witness where of, the Contract or has here unto set its hand through its authorized representative under the common seal of the company, the day month and year first above mentioned.

**SCHEDULE NO.1**

ParticularsoftheEqu ipments handedover	Quantity	Valueofthe Equipment	SignatureofAut horisedPerson

Witness I

1. Signature
2. Name

For and on behalf of M/s.....

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>3. Address</li> </ol> | Name<br>Signature<br>Designation<br>Authorized<br>representative |
|--|--|

Witness II

- |   |                                   |
|---|-----------------------------------|
| <ol style="list-style-type: none"> <li>1. Signature</li> <li>2. Name</li> <li>3. Address</li> </ol> | (CommonSeal)(Incas<br>eofCompany) |
|---|-----------------------------------|

**Form-8**  
**(Part-I)**  
**Summary of Bid Price**

DESCRIPTION	Value per NMS(INR)	Value for 26 NMS(INR)
<b>I. SUPPLY OF THE EQUIPMENT</b>		
1) For goods supplied a) Cost of goods off-the-self as per Noise Monitoring Station (NMS) supplied in Delhi-including all duties except GST. b) Cost of installation and commissioning c) Price of other incidental costs if any,		
Sub Total (a+ b + c)		
2) For the Goods/Central server a) Cost of Central server at DPCC Headquarter b) Commission, Incidental expenses as Networking, Data Communication Equipment and Accessories	xxx	
Sub-Total (a + b)	xxx	
<b>II. COST OF TRAINING : lump sump for Noise Project</b>	xxx	
<b>III. QUOTED PRICE (QP) : ( I + II)</b>	xxx	
<b>IV. Total O&amp;M cost for ten years as indicated Form-8 ( Part- II)</b>		
<b>GRAND TOTAL CONTRACT PRICE (III+ IV)</b>		

**Note\*:-** The price to be quoted are exclusive of GST since GST will be paid as per actual.

**FORM-8**

**(Part-II)**

**BID PRICE BREAKUP FOR O&M OF ONE NMS FOR TEN YEARS**

<b>Sl. No.</b>	<b>Year of O&amp;M</b>	<b>Total Charges for the year Consisting of Security, Electricity, Communication, Man power, Spares and Consumable for O &amp; M</b>
1.	1 <sup>st</sup> year	
2.	2 <sup>nd</sup> year	
3.	3 <sup>rd</sup> year	
4.	4 <sup>th</sup> year	
5.	5 <sup>th</sup> year	
6.	6 <sup>th</sup> year	
7.	7 <sup>th</sup> year	
8.	8 <sup>th</sup> year	
9.	9 <sup>th</sup> year	
10	10 <sup>th</sup> year	
<b>TOTAL</b>		

## **INSTRUCTIONS FOR ONLINE BID SUBMISSION**

As per the directives of Department of Expenditure, this tender document has been published on the Delhi Govt. Procurement Portal (URL: <http://govtprocurement.delhi.gov.in>). The bidders are required to submit soft copies of their bids electronically on the DPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the DPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the DPP Portal.

More information useful for submitting online bids on the DPP Portal may be obtained at: <http://govtprocurement.delhi.gov.in>.

### **REGISTRATION**

- 1) Bidders are required to enroll on the e-Procurement module of the Delhi Govt. Procurement Portal (URL: <http://govtprocurement.delhi.gov.in>).
- 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 DPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC /e-Token.

### **SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the DPP 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 DPP 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 DPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### **PREPARATION OF BIDS**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of

documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.

- 3) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders.

Bidders can use “My Space” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

### SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original EMD should be submitted at Delhi Pollution Control Committee, 4<sup>th</sup> and 5<sup>th</sup> Floor, ISBT Building, Kashmere Gate, Delhi-110006, on or before the due date prescribed on the NIT. The details of the EMD 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 bid schedule format has been provided with the tender document to be filled by all the bidders. If the price bid file is found to be modified by the bidder, the bid will be rejected.
- 6) The serve time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 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.
- 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, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 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 queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to DPP Portal in general may be directed to the 24x7 DPP Portal Helpdesk.

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**TECHNICAL SPECIFICATION**

**1.0 SCOPE OF PRESENT TENDER ENQUIRY**

Delhi Pollution Control Committee (DPCC) has planned to augment the Real Time Ambient Noise Monitoring Network with additional 26 Noise Monitoring Station (NMS) with 4G or better modem for transmission of data to dedicated Central Receiving Station (New).

Basic Network Architecture and Layout is shown in Annexure- IV. The Noise monitoring stations shall provide SMS alarms notification to the Central Receiving Station to warn about overpassed alarm user predefined thresholds as well as for internal system self-diagnosis report.

**2.0** The new additional sites will transmit the data to the Central Receiving Station using 4G or better communication with the following:

- All the remote stations should be operational in a real time mode and central station should be able to access any remote station in network mode.
- The remote stations should be field operational and tolerant to extreme environmental conditions in India, in high or low temperatures and high humidity.
- The remote stations should be rugged and should not require manual intervention for at least 5 years except routine calibration and battery replacements.
- The communication between Remote and Central Receiving station must be two-way communication system.
- The Central Receiving Station will poll the remote station at user predefined regular intervals. If any alarm condition is met at remote stations, this alarm will be immediately communicated by SMS to the Central Receiving Station. After receiving the alarm the Central Receiving Software will immediately poll the remote station under alarm condition and will automatically download the data that caused the alarm to properly analyze it.
- The vendor should offer a network attach storage with minimum 4 TB of HDD and should be used for incremental backup.
- Operator from Central Receiving Station must be able to configure parameters of remote stations via software.
- Operator from Central Receiving Station must be able to restart the Remote Station through command via software.
- The Central Server data need to be distributed to DPCC and Delhi Government. Vendor should provide a web enabled software to distribute the data and products to authorized users with highly secured mode. Web portal should provide public access to view and download limited data as defined by DPCC.

- Type of reports to be generated from Central Receiving Station:
  - (i) Leq (Day time) : 06:00 AM to 10:00 PM - Daily
  - (ii) Leq (Night Time) : 10:00 PM to 06:00AM - Daily
  - (iii) L10, L50, L90 etc.
  - (iv) List of the values with their location and time should be compiled in Tabular form for assessment of noise data.
  - (v) Monthly report generation for all the stations.
  - (vi) Yearly report generation for all the stations.
  - (vii) Data in any other user define format ( In graphic or tabular format).

### 3.0 TECHNICAL SPECIFICATIONS OF REMOTE STATION

The Remote Station for Ambient Noise Monitoring Network should have a standalone operating terminal, appropriate for outdoor installation for continuous measurement of ambient noise. Microphone connected to an advanced acoustic signal processing unit, complete with an electronic measurement and processed-data storage, provided with an integrated 4G or better communication system.

The Remote Station should allow the connection of other meteorological sensors whose measurements can contain scientific correlations with Noise Levels.

#### 3.1 General Specifications of Noise Monitoring Station (NMS) :

NMS consists of a weatherproof cabinet containing a noise level analyzer a communication device for transmitting data to receiving station, a back plate and an outdoor microphone, all of which can be mounted on a mast.

- (i) Standards : IEC 61672-1 (2003/2013)\* Class 1, Class 1 type for Omni directional
- (ii) Power Supply : 230v AC±10% Uninterrupted power supply with power backup at least 6 hrs. Instruments should have internal rechargeable battery with capacity of 10 hrs in case of power failure.
- (iii) Time weighting : Fast, Slow, Impulse and Peak IEC 61672-1 (2013)
- (iv) Frequency /weighting : A and C
- (v) Dynamic Span : 110 dB or more(30-130dB)
- (vi) Noise floor : < 19(A) dB
- (vii) Memory : Storage of all the above measured and stored data for at least 1 month at 1-second acquisition rate
- (viii) Calibration : Automatic Calibration
- (ix) Resolution : 0.1 dB (A)
- (x) Display : Auto brightness, alpha numeric, display High viewing angle, high brightness display.
- (xi) Operating Temperature Range : -10<sup>0</sup>C to +50<sup>0</sup>C
- (xii) Humidity Range for external devices : 90% condensing
- (xiii) Humidity range for internal devices : 90 % RH Non - Condensing
- (xiv) Communication ports : RS232, USB, Ethernet/TCP/IP or better
- (xv) Sampling Rate : Short Leq time history user selectable from 125ms, 1 second or 2 second etc. Leq, Lmax, Lmin and Ln periods adjustable between 1 minute and 1 hour.
- (xvi) Measured and Stored data : (1) Leq, Lmax, Lmin, Lpeak, L10,L50 & L90 .  
(2) Short time Leq with Measured time and date.
- (xvii) Number of Input Channels : 02
- (xviii) Communication mode with central receiving station/ server : 3G/4G, internet connectivity, mobile connectivity or better.
- (xix) Programmability : Fully Programmable. All functions must be programmable from remote access or direct from the instrument.

- (xx) Diagnostic : Self-diagnostic feature should be available.
  - (xxi) Essential functions : Time Synchronization with central receiving station/ server.
  - (xxii) Remote Access : Web interface with Web monitoring feature
  - (xxiii) Remote Calibration : Remote calibration from Central Station
- \* Class I Type international certification with Horizontal and Vertical reference direction either from LNE, PTB, METAS, CEM or BEV .

### 3.2 Enclosure:-

#### A. Remote Stations:-

Weatherproof cabinet	Weatherproof enclosure with IP-65 protection suitable for mounting on mast.
Security	Should be supported/equipped with standard sensors to check the unauthorized intrusion and have ability to produce telecommunication alarm if the enclosure has been opened. In-built GPS position,.
Mast	Length of Lattice mast should be 4 meter and to be mounted in a concrete base. The material of the mast should be galvanized and non-corrosive.
Cabling	All cables are armored and protected by conduits
Flexible	There should be provision of adopting/ installing standard interfaces.

#### B. UPS Enclosure:

Weatherproof enclosure protection suitable for housing of Electric connection, UPS and batteries (6hrs backup)

**Note: All the installation and mounting accessories bolts should be of stainless steel to avoid corrosion.**

### 3.3 Specification for Outdoor Microphone:

Standards	IEC 61672-1(2003/2013) Class1, Class 1 type for Omni directional
Sensitivity	50-60 mV/Pa
Microphone Type	Permanent Outdoor Microphone based on External polarized capsule (for better Temperature and Humidity performance)
Operating Temp	-10°C to + 50°C
Humidity Range external components	90% RH (Condensing)
Humidity Range internal components	90% RH (non condensing)
Range	30- 130 dB (SPL)
Frequency response	IEC 61672 Class 1 (2003/2013)
Output connector	Compatible with NMT
Pole adapter	Suitable for instrument monitoring

Accessories Required

Bird spike, wind screen, Protected Extension cable

### 3.4 Laptops - 01No.

01 no. of laptop will be required for data abstraction from remote station (in case of telemetric communication failure) with MS Office 2010 or better at the time of delivery, antivirus and noise post processing software.

Laptop configuration is mentioned below:

Make	:	HP/Dell
Operating System	:	Windows 10 or better at the time of delivery
Hard disk capacity	:	2 TB or more
RAM	:	6 GB or more
Processor	:	Core™i9 or better at the time of delivery
Screen Size	:	15 inch LCD display.

## 4.0 Specification of Hardware and software for Central Receiving Station.

### 4.1 Dual Redundant, Hot Standby Servers - 1 No.

The server has 2 TB HDD or latest for data receiving, retrieval and archiving with software for receiving, processing, visualization, data basing and archiving and communication accessories including cables, civil work, modems, switches etc.

Specifications

1. The servers should be fixed in a 19" (800x1000mm) 42" rack with casters and glass door. The architect of the servers should be 100% redundancy with heat beat / status being reported to the administrator on Email/SMS in case of the failure event.
2. Both servers will be loaded with original software's and should be always in Hot position to take over from main server to secondary server and vice versa.
3. The data base will be updated in both the servers in real time to avoid any loss of data in case of server failure.
4. The performance/benchmark during the acceptance of system will include,
  - Raid 5 implemented on both servers with 3 hard discs in each server.
  - Automatic fail over process.
  - Automatic / manual fail back process.
  - Intimation to administrator during fail over / fail back.
  - Time taken during failover (should be less than 20 seconds)

- Both the servers will be connected to a common keyboard and monitor through a KVM switch.
- 24 port Giga switch will be installed in the rack for connecting the nodes
- Dual port Wan hardware firewall should be provided

The hardware details of the sever is (01 Number, identical servers required for Hot redundancy located within Central Station in 19” rack)

- 1) Manufactured by ISO 9000 and 14000 manufacturing unit HP/COMPAQ/IBM/DELL ONLY
- 2) Processor- Intel Xeon Quad Core or higher with minimum, 2 MB L2 Cache memory, Front Side Bus - 800 Mhz
- 3) Rack Mountable- 4U / 6U- Rack Mountable Server with rack mounting kit
- 4) No. of processors- 01 number ( Dual Processor)
- 5) Memory - 8 GB RAM / Scalable to 16 GB min, ECC DDR RAM memory (800 MHz minimum)
- 6) HDD- 1\* 1 TB (hot plug) Ultra 160 SCSI disks. 10 K RPM
- 7) Networking- 1 x 10/100/1000 MBPS Ethernet controller 11)
- 8) DVD reader, DVD RW Drive
- 9) Power Supply- Redundant Hot Pluggable power supply, 1 x 600 W or more (N\*1 redundancy).
- 10) Operating System- Win Server (latest available version), with media and manual, Antivirus for Win Server Antivirus should provide comprehensive Virus protection for Windows based network. It must provide Virus protection at the Gateway for all inbound and Outbound HTTP, SMTP & FTP Traffic across the network with hardware Firewall.
- 11) Audited TPC-C throughput- Must have audited TPMC rating Certificate must be attached
- 12) Keyboard- Standard Keyboard (104 Keys) Mouse - PS/2 type Microsoft or equivalent scroll mouse
- 13) Monitor- 19” Flat Panel LCD Monitor.
- 14) **Router – Suitable router and firewall for security**
- 15) **Multiple communication possibilities**
  - Mobile phone system 4G or better.
  - SMS for alarms and smart phone data request
  - Communication via IP link (client or server)
  - Optional-Alternative communications systems ( Optical Fiber)
  - Redundant communications. Each remote station could include up to three types of communication profiles. If one communication profile fails, the system will connect with redundant communication system automatically.

#### 4.2 Web Enabled Servers - 1 No

All Specifications are same as above server but not hot redundant. The Central Server data need to be shared

with web Enabled Server for distribution to DPCC & CPCB.

#### 4.3 UPS - 1 No

Any standard make 5 KVA UPS with sealed maintenance free batteries for 6 hours Power back to Hot redundant servers, web servers and data processing computer.

#### 4.5 Data processing Workstation PC -01 No

Work station will be used for data abstraction, visualization from central server. Specification for works station is mentioned below:

Make/Company	:	HP/Dell/Lenova Desktop PC
Operating System	:	Windows 10 professional or better at the time of delivery.
Hard disk capacity	:	2 X 1 TB or more
RAM	:	8 GB or more
Processor	:	5th Generation Intel® core I7- 2600s processor (2.8 hz) or better processor(4M cache, up to 3.0 GHz , TPM) or better
Display	:	22.0”.
Accessories	:	Mouse, Bag etc.

Workstation shall equipped with all accessories like mouse, keyboard, 22” screen, DVD reader/writer, internal audio, External O/P ports, graphic card and any other accessories.

#### 4.6 Specification of Software for Central Receiving Station

Software package for the communication, from measuring and acquisition stations, both locally and remotely via a PC. Intuitive and easy to use application which runs on Windows OS. Data Retrieval in real time or by command with automatic and/or manual operation and data storage in a SQL database, in order to allow and carry out the data analysis and data processing. It must be compatible and seamlessly to integrate to old system in new noise monitoring terminals.

##### **Software Management:**

- Software capable for requesting, downloading, editing, processing and representation and management of data.
- The software integrates the entire data request commands made to the stations in real time data or data saved in the memory.
- Software allows the user to change and/or modify the configuration of the stations, enable to perform tasks such as date and time synchronization with the computer and adds new

measuring channels specifying the different sampling and storage periods, as well as the statistical calculations to be stored.

### **Hand on Operations**

The following parameters of stations must be configurable for each station.

- Allow the Setting of Date/Time of the station.
- Downloading of data stored in the station
- Downloading the station's configuration of PC
- Downloading of PC's configuration to the stations
- Alarm trigger user settings for each channel.
- Channel calibration settings.
- Real time data request from each channel.

### **Data Analysis**

- Data enquiry over several days
- Comparison of readings between stations
- Daily statistics enquiry
- Strip charts of the daily statistics.
- Comparison between the daily statistics of various stations
- Comparison between parameters from the same station or from different stations

### **Visualization of Data**

- Enquiry of data in Table Form
- Enquiry of data in graph form
- Temporary graphs composition window

### **Additional Features**

- Printing of various reports and graphs as per the prescribed format as per annex.
- Zoom in and Zoom out facility with automatic graph scale Resizing
- Registers all the events like Information messages, error messages.
- Information of the communications resources used by the PC at that moment  
Exportation of readings to .txt, word, excel, jpeg, pdf and xml files.
- Configuring maximum and minimum thresholds and sending alarms by e-mail or SMS if data exceeds them.
- Customizing maps with icons representing the selected stations. Icons should change their color if there is an alert in a station.
- Creating, enquiring and displaying on graphs new variables using configured parameters and operators.
- Configuring maximum and minimum thresholds and sending alarms by e-mail or SMS if data exceeds them.



**Regular updates of software shall be provided on half yearly basis. Software shall be modified as per our requirement and it must include basic and advance statistical tools for data analysis and report generation for managing the huge database.**

#### **4.7 Web Enabled Software for data distribution**

The Web Software Platform must be able for web posting of the data available on the [Central Server at DPCC, 5<sup>th</sup> Floor ISBT, Building, Delhi, in such a way that all authorized persons with an internet connection (ADSL) would have the possibility to access to the information of all the noise monitoring terminals. The user can customize the way to display the noise parameters. The user can play the role as administrator and define other users access rights. Considering data transmission from the remote terminals to the Central Server is carried out via 3G or better cellular network, data can be updated, for example, every 5 minutes or 10 minutes, or 15 minutes, as programmed by the DPCC Officials. The Web Enabled Software must have following features:

- 1) Only authorized users can access the web enabled data
- 2) The format for administrator for issue of user id and password should be provided.
- 3) The authorized user should have access to current data and historical data.
- 4) User should have provision for full graphical plotting of the time series of the data and comparison of data from historical data of the station.
- 5) Graphical and GIS based visualization of all the Noise monitoring terminal
- 6) In graphical representation should have full attributes, which should be displayed by positioning cursor on the map.
- 7) Image superposition on a map or on an imported noise map
- 8) The selected station by clicking on the map must show the geographical information and status of the stations, for example Name of station, Station ID, Latitude, Longitude, Height (msl) etc.
- 9) On selecting a station, the complete menu of the data should be displayed.
- 10) Data can be selected both in Tabular and graphical format
- 11) The graphical display for all noise parameters should be available
- 12) The graphical plot of noise data analysis like Peak Noise, average noise etc. are available for the user.
- 13) Noise monitoring at all the station should be available with Calibration check status, Noise level alarm, saturation level indication.
- 14) The authorized users can download noise data in PDF and Excel format.
- 15) User should have provision for full graphical plotting of the time series of the data and comparison of data from historical data of the station.
- 16) Graphical and GIS based visualization of all the Noise monitoring terminal
- 17) In graphical representation should have full attributes, which should be displayed by positioning cursor on the map
- 18) Image superposition on a map or on an imported noise map
- 19) The selected station by clicking on the map must show the geographical information and status of the stations, for example Name of station, Station ID, Latitude, Longitude, Height etc.

- 20) Automated reports about user-selected periods (day, week, month, year, etc.) in word, pdf and jpg format.
- 21) Limited display of data in DPCC website for public domain as per format.
- 22) Spectrogram: real-time display of the frequency representation of the acoustic levels measured versus time
- 23) Noise mapping at all the station should be available with Calibration check status, Noise level alarm, saturation level indication.

**5.0 Back facility:** The vendor should quote for NAS (Network attached storage with RAID 5) minimum 4 TB for automatic incremental backup of existing and new database.

## 6.0 Calibrator:

### Specifications for External Acoustic Calibrator

#### STANDARDS

EN/IEC 60942 (2003), Class 1

#### Sound pressure level:

Nominal: Dual range 94 dB and 114 dB/single range

**Frequency** : 1000 Hz

**Power** : Battery operated

Carry and storage case to be provided

**Adaptor** : suitable adaptor for microphone (as quoted by vendor).

**OPERATION & MAINTENANCE OF NOISE MONITORING STATIONS(NMS)**

The bidder responsibilities shall include without limitations the following works to be carried out on the Noise Monitoring Stations installed under this Contract during the Operation & Maintenance of the NMS:

- (a) Operation and Maintenance of all the commissioned equipments and amenities as supplied by the Manufacturer under the Contract including services during forced and planned outages and overhauls.
- (b) The bidder shall take over the entire Noise Monitoring Stations (including all equipment) for O&M after execution of Indemnity Bond as per format placed at form-7 of bid document.
- (c) The Operator shall provide to the DPCC a monthly summary of all operation and maintenance activities performed by the operator during each month.
- (d) Operation and Maintenance Obligations:

In implementing its obligations to operate and maintain the facility under this Contract, the Operator shall:

1. Undertake comprehensive maintenance including i.e. schedule and breakdown maintenance & repair at site and keep Committee Informed regarding status of equipments and forward daily data.
2. Obtain permission from the DPCC and inform the OEM for any assistance for which equipment is required to be sent to the works. Operator shall arrange substitute equipment to keep NMS operational.
3. Take reasonable action to assure that the Personnel deployed at Noise Monitoring Stations and any sub operators and agents are provided with a work place in compliance with applicable Law.
4. Keep the Noise Monitoring Stations clean, well maintained and in good working condition.
5. Security: It is the duty of the Operator to secure the movable, immovable and other properties of the DPCC at the Noise Monitoring Station. The Operator shall indemnify the loss caused to the DPCC on account of any damage, loss or theft caused to the property of the DPCC.
6. Scheduled Maintenance: Unless DPCC and Operator mutually agree otherwise, perform all required Scheduled maintenance for all equipment, auxiliaries etc., in accordance with the O&M specifications.
7. Unscheduled Maintenance: Perform all Unscheduled Maintenance and repairs for all equipment, auxiliaries etc. within (24) hours of the occurrence of the event requiring Unscheduled Maintenance, the operator shall provide the DPCC with detailed written information on nature of the repair or replacement to be carried out, estimated down time and other necessary details as required and key one stand by system to reduce down-time if any to less than 24 hour.

8. The Operator shall source all the spares required for maintenance & repairs of the installed equipment from OEM only.
  - a) The Operator shall not:
    - i) Make any modifications as to the Noise Monitoring Stations, other than in an Emergency, without the prior written approval of the DPCC, or
    - ii) Dispose off any assets, settle law-suits or engage in transactions relating thereto on the DPCC's behalf without the prior written approval of the DPCC.
  - b) The operator shall purchase spare parts, materials, supplies and other consumable items, and maintain an inventory thereof, for the Noise Monitoring Stations. All such material supplied and other items shall be the property of the Operator However all the spares shall be sourced from OEM's only.
  - c) The Operator shall review all applicable Laws and initiate and maintain such prosecution, procedures and operating plans relating to operation of the Noise Monitoring Stations as are necessary to comply therewith or assist the DPCC in complying therewith as the case may be.
  - d) The Operator shall operate the equipment as per the laid out standards in the operating manual of the equipment and provide data for ambient noise to DPCC on continuous basis. The daily, monthly and yearly reporting will be made as required.
  - e) The NMS has to be in operation for a minimum of 90% of the days in a year, 24 hours a day, and should not be inoperable for more than 3 days at a stretch.
  - f) The operator shall provide data collected through operation of the equipments on daily basis. .
  - g) Establish and maintain a daily and monthly and yearly reporting system to provide storage and ready retrieval of operation and maintenance data including such information necessary to verify calculations. The monthly reporting shall contain variances from targets.
  - h) Provide access to the DPCC to the Noise Monitoring Stations and its data at all reasonable times and as and when required.
    - Provide the operational data required to all competent authorities including, Government of India or Government of NCT of Delhi.
    - The Operator shall ensure accuracy of the data provided as per standards.
    - The operator shall ensure periodic re-calibration of all the equipment as per manufacturer's instructions.
  - i) DPCC shall arrange for the following and Operator shall guide and assist the DPCC:
    - The DPCC shall pay O&M charges to the Operator at the end of each quarter after submission of validated data & report by the Operator, in accordance with the payment terms detailed in Special Conditions of Contract.
    - DPCC shall pay all fees including Tax, etc., imposed upon DPCC by the Applicable Law.
    - The DPCC shall identify and hand over the site for erection & commissioning of Noise Monitoring Stations free from all encumbrances.
    - The DPCC shall make the arrangement for electricity connection at the site. However, monthly charges for both electricity and communication bill shall be borne by the Operator.

- The valid data capture rate should be minimum 95%. The full payment shall only be made if validated data is 90% and all the calibration protocol maintenance scheduled and spare parts/ consumable replacement document are maintained and verified by the DPCC/ . The operator has to maintain records / Receipts/ bills paid available as and when required.

**Handing Over of Station:** On expiry/closure/termination of the Contract Agreement, stations shall be handed over to Committee in working condition to the satisfaction of Committee. Few or all the spares procured by the Operator and unused as on date of handing over may be purchased by the DPCC at his discretion provided Operator is able to provide reasonability of the costs of such spares. In addition the Operator shall provide consumables equivalent to three months consumption on expiry/closure/termination of the Contract Agreement without any extra financial implication.

**Relocation of Station:**

During contract period, if intends to shift NMS from one location of the city to another location, due to some reason – functional or otherwise, Bidder shall shift the NMS for which cost of shifting including dismantling, loading & transportation, reinstallation at new location and construction of foundation will be made by the at a mutual agreed cost.

**Penalties:**

During O&M period, in case of any NMS failure, penalty will be charged by @ Rs.2,000/- (one thousand) per day per NMS after a grace period of seven (7) continuous non-working days. The grace period of seven (7) continuous non-working days shall be given only once per quarter (3 months).

For a failure of Data display on Board/panel, a penalty will be charged by @ Rs. 1,000/- (one thousand) per day after a grace period of five (5) continuous non-working days. The grace period of Five (5) continuous non-working days shall be given only once per quarter (3 months).

Failure due to power outage and other Force Majeure conditions shall not be considered for levy of penalty.

Total penalty per year during O&M period on account of above conditions shall be limited to 30% of total O&M charges for one year. Failing which defective/ malfunctioning analyser/ system has to be replaced.

In case penalty in the year exceeds 30% as above, the Operator shall be required to replace the defective part with new ones at his own cost, failing which the shall have the right to terminate the O&M contract.

**SCHEDULE**

Operator shall complete all activities covered in the scope of work up to installation & commissioning of Noise Monitoring Stations within one month from date of notification of award.

The Operator shall carry out Operation & Maintenance of Air Monitoring Stations for a period of ten (10) years from the date of commissioning of the station.

The operation and maintenance contract shall be executed by the Member Secretary of state Pollution Control Committee having jurisdiction of the area under his control. The term and

condition shall be governed as per the tender document. The Member Secretary of or any person authorized by him shall be the ultimate consignee.

