

**CENTRAL POLLUTION CONTROL BOARD
NATIONAL AMBIENT NOISE MONITORING NETWORK**

DOC.NO A-19014/50/09-MON

Pre-bid Meeting: 19th March, 2013

PRE BID QUERIES AND REPLIES

In compliance to terms of invitation for bid, a pre-bid meeting was convened on 19/03/2013 in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-32. The Pre-bid meeting was attended by 09 participants. The register of bidders/ participants is provided in Table 1. The list of CPCB/SPCB's officers attending the pre-bid opening is given at table 2. Points raised and the queries/response of the pre-bid meeting is given in table 3. All vendors were requested to download the tender and addendum document from CPCB's website.

Present were:

Table 1: Representatives of Bidders

S.N	Name of Bidder	Place of registration	Name of representative (s)	Phone No.	Email id
1	M/s Structural Solution Pvt Ltd	Hyderabad	Sh. V.K.Goel & Sh. Irfan	09015140500	vkgoel@stsols.com
2	M/s JOSTS Engg. Co Ltd	Delhi	Sh. Brijesh & Sh. Piyush	09873077701	bsbhadauria@josts.in
3	M/s EME Noida	Noida	Sh. Vikas Bhandari	09868120599	emeindian@gmail.com
4	M/s AIMIL Ltd	New Delhi	Sh. Anurag & Ms. Varsa	09818171786	varsa@aimil.com
5	M/s SGS Weather & Environmental System Pvt Ltd	New Delhi	Sh. A.K.Singh & Sh. Vipin Gandhi	09958830445	Singh.ak@weather-india.com

Table 2: Representatives of Purchaser

S.N	Name	Organisation	Designation	Phone No.	Email id
1.	Dr. Madhu Bhardwaj	Uttar Pradesh SPCB	Chief Environmental Officer	(0522)-2720831	centrallabuppcb@yahoo.com
2.	Dr. M.P. George	Delhi Pollution Control Committee	Scientist 'D'	09717593520	mohanpg@gmail.com
3.	Dr. B. Nagappa	Karnataka SPCB	Scientific Officer	09008077338	aqmc@kspcb.gov.in
4.	Sh. R.Mohan	Tamilnadu SPCB	Assistant Director (Lab)	08056042123	mohantnpcb@gmail.com
5.	Sh. S.C. Kolhar	Maharashtra	Scientific Officer	09869770497	airpams@mpcb.gov.in

AKWaha

QMBha

S.N	Name	Organisation	Designation	Phone No.	Email id
		SPCB			
6.	Sh. Probir Kumar Barai	West Bengal SPCB	Senior Scientist	09874808195	probirb@wbpcb.gov.in
7.	Sh. R M Bhardwaj	CPCB, Delhi	Scientist 'D'	9868211284	-
8.	Sh. Virender Bansal	CPCB, Delhi	AAO		banviren@yahoo.com
9.	Sh. M.Varghese	CPCB, Delhi	Administrative Officer	-	-
10.	Sh. A.K. Sinha	CPCB, Delhi	Scientist 'D'	09868256721	Aksinha.cpcb@gmail.com
11.	Sh. Vishal Gandhi	CPCB, Delhi	Scientist 'B'	9891254423	Vishal.cpcb@gmail.com
12.	Sh. Rajinder Singh	CPCB, Delhi	STS		

A.K.Sinha

R.M.Bhardwaj

Table 3: Points raised at the meeting and in writing are presented with responses

S.N	Reference to Section and Para/Clause of Bidding Document	Original Page and Para or Clause in Bidding Document issued	Query	Response
1.	List Of deliverables	Page 50-51	Do all suppliers have to quote all the equipment specified in the Tender?	Please refer to Amendment no. 1.
2.	Proof of technology	Page 11-12	In order to meet Section 5.0, in the required timeframe, can we get access to data source code from Geonica as soon as possible. Can we have ICD(interface controller document, data transmission method be available. For integration of system, CPCB has to give us a guarantee for supporting in getting all the information required for developing the interface for bridging the existing server with 35 NMT,s with new 35 NMT and server.	Please refer to Amendment no. 1.
3.		Point 36.1 –Page 29)	Please clarify the need for 10days without charging and the circumstance which this will occur?	No change envisaged
4.			In keeping with IT best practice, would CPCB entertain a hosted noise monitoring solution	No change envisaged
5.	Enclosure	Point 36.2 –page 30	The tender ask for IP65, in the last tender we tested IP55 in India and was deemed acceptable. Will CPCB accept IP55 noise terminal for phase 2?	No change envisaged

S.N	Reference to Section and Para/Clause of Bidding Document	Original Page and Para or Clause in Bidding Document issued	Query	Response
6.	LCD scrolling Display system	Point 37 -Page 32	a. We assume that all will be mounted indoor. b. 40 inches is not standard. c. Embedded system control - Please clarify	Yes, all display system will be mounted Indoor. 40 Inches LCD display is commercially available in Indian Market. Embedded system control means a complete system with LCD display like CPU, modem etc for fetching the data from Web Server.
7.	LCD Display Software	Page 33	It talks of LED scrolling display	Please refer to Amendment No.-2.
8.	Calibrators-	Point 41.1- page 40	Specification for hand held calibrator- Please explain and clarify the use and meaning of such calibrator.	Twice in a year calibration will be done with the use of these calibrators. Hand held calibrator is referring to Sound Level Meter.
9.	EMD	Point 3.48-page 10)	Please refer to EMD of Rs 25 lacs for the tender. For similar scope in last tender, there was EMD of 5 Lacs. Please clarify.	Please refer to Amendment No.3.
10.	Training	Point 6 Page 12	Training for 11 Officials, please explain the logic behind this. The training in depth can be given here in India	No change envisaged
11.	Taxes & duties	Point 16, page-16.	Custom duty to be paid by bidder. Please clarify CD. If providing of exemption certificate is delayed from CPCB, who will be responsible for demurrage.	Concessional custom duty certificate will be given by CPCB (Government of India Custom Duty exemption notification 51/96 dated 23.07.96 and 10/97 Central Excise dated 01.03.1997 amended time to time.) Custom duty and all other charges as applicable at the time of clearance of consignment from Airport to be borne by the

S.N	Reference to Section and Para/Clause of Bidding Document	Original Page and Para or Clause in Bidding Document issued	Query	Response
				bidder.
12.	Inspection & test	Point 15.2, page-16	FAT, why required. Please clarify.	No change envisaged
13.	Proof of technology	Page 11 Point 5	We have already done successful demonstration in Phase-1 project. Is demonstration necessary for bidders, who have already done successful demonstration in previous tender?	No change envisaged
14.	Laptop	Page 32 Point 36.5	Screen Size is not available	Please refer to Amendment No.-4.
15.	LED Scrolling display	Page 33 Point 37	Software is written for LED scrolling display, however requirement is for LCD display. Please clarify	Please refer to Amendment No.-2.
16.	INSTALLATION, SYSTEM INTEGRATION AND COMMISSIONING	Page 15 Point 15	Why Triangular Mast only, not the aluminum galvanized mast etc as the ambience is not good.	No change envisaged.
17.	-	-	Why Octave band is not included, if you want latest system.	No change envisaged.
18.	-	-	Bid date Extension	No change envisaged
19.	-	Para 3.41 Page 9	Please note that Performa Invoice must be separate for each instrument/items.	Single Performa Invoice need to be submitted for all instrument/items.
20.	Bank Guarantee	Para 3.48 Page	Please provide the Bank guarantee format.	Please submit bank guarantee as per General format of bank.

S.N	Reference to Section and Para/Clause of Bidding Document	Original Page and Para or Clause in Bidding Document issued	Query	Response
		10		
21.	-	Para 36.1(ii) Page 27	Range 230v AC +/- 10 %, These are main power spec. , What is the noise range required in dB.	Please refer to Para 36.3 .
22.		Para 36.1 (xii)Page 29	Display- Requirement for an 18 key keypad.	No change envisaged
23.		Para 36.1 (xvi)Page 29	Communication port	No change envisaged
24.		Para 36.1 (xvii)Page 30	Sampling Rate	Sampling rate must be user selectable from 125 ms to 1 hour.
25.		Para 36.1 (xix)Page 30	Input Channels 10 or more	No change envisaged
26.		Para 36.1 (xx)Page 30	Preference will be given to better resolution. What is the meaning of preference? Is their any financial weight assigned to this in costing , if yes what is the criteria?	No financial weight will be given.

AKANKE

[Handwritten Signature]

ADDENDUM

CENTRAL POLLUTION CONTROL BOARD NATIONAL AMBIENT NOISE MONITORING NETWORK

DOC.NO A-19014/50/09-MON

Pre-bid Meeting: 19th March, 2013

AMENDMENT TO BID DOCUMENT

Amend-ment No.	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Para or Clause after Amendment/ Additional information to be included in Bidding Document	Existing Clause of Bid Document	Revised Clause
1	<p>Para 5 page 11</p> <p>Para 35.0 Page 27</p> <p>Para 39.0 Page 34</p> <p>Point 4 Page 50</p>	<p>Integration with Existing Central Receiving Station</p> <p>PROOF OF TECHNOLOGY</p> <p>Overall Requirements Of Real Time Ambient Noise Monitoring Systems To Be Supplied</p> <p>Specification of Hardware and software for Central Receiving Station (if quoted by vendor).</p> <p>Central Receiving station (Required if bidder is unable to integrate the proposed network in the existing Central Receiving Station</p>	<p>All bidders need to offer full central receiving station as per point 4 of List of deliverables of tender document. The cost of Central receive station will be added in price comparison. Vendor shall provide Source code along with the software under non-disclosure agreement.</p> <p>With respect to proof of technology, the bidder need to demonstration full system along with functionality of central receiving station. However, two option are kept in scope of work:</p> <p style="text-align: center;">(Optional)</p> <p>1. Requirement for integration with existing central receiving station in respect of demonstration and execution is</p>	-	-

AWA/Inha

Qm (Shan)

Amendment No.	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Para or Clause after Amendment/ Additional information to be included in Bidding Document	Existing Clause of Bid Document	Revised Clause
			<p>not needed.</p> <p>or</p> <p>2. In case, Bidder is interested or feel capable for Integration with existing central receiving station, the same need to be proved during demonstration.</p>		
2	Para 37.0 Page 33	Software used for LED scrolling display must show real time values of Noise Monitoring stations	Please read as LCD Display	Software used for LED scrolling display must show real time values of Noise Monitoring stations	Software used for LCD display must show real time values of Noise Monitoring stations
3	Para 3.48 Page 10	<p>An Earnest Money Deposit of Rs 25,00,000/- (Rupees Twenty Five Lakhs Only) should be deposited in the form of demand draft or Bank Guarantee valid till validity of the tender in the favour of "Central Pollution Control Board, Delhi" and should be enclosed along-with the proposal.</p> <p>The earnest money of unsuccessful firms shall be returned in the same forms if:</p> <p>i. The firm failed to qualify in technical evaluation.</p> <p>ii. The firm technically qualified but not the lowest bidder in financial evaluation after the financial evaluation.</p> <p>iii. The earnest money of successful firm shall</p>	The firm who seek exemption from depositing Earnest money being Small Scale Industry, being registered with NSIC, DGS&D and other Govt. Agencies, which entitles them for exemption must submit the valid registration certificate- cover the instrument offered by them along with permissible value. The copy of Government notification granting exemption from deposit of EMD must be submitted along with the Techno commercial part of tender along with the bid. (EMD exemption will be granted only to those items	-	-

Amendment No.	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Para or Clause after Amendment/ Additional information to be included in Bidding Document	Existing Clause of Bid Document	Revised Clause
		<p>be returned without any interest after the successful installation and commissioning of the system.</p> <p>The proposal should be submitted to the "Incharge PAMS Division" Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Shahdra Delhi-32 latest by 2:00 pm on 23.04.2013.</p>	<p>specified in the certificate of registration)</p> <p>The bid security shall be in the form of demand draft or Bank Guarantee from any commercial bank in acceptable form in favor of Central Pollution Control Board payable at Delhi. No earnest money shall be accepted in any form. It should be either in Indian Rupees or in Bid Currency. The Indian agent/representative should furnish an authorization letter from their foreign principal suppliers to deposit EMD on their behalf. The EMD shall be forfeited, if the bidder withdraws or amends the tender in any respect with in the period of validity of this tender or fails to supply the instrument within specified period in the tender document. Tender where tenderer has not furnished adequate earnest money in the prescribed and acceptable form shall not be entertained. In case instrument supply is found defective and not attended by supplier/ authorized agent , the earnest money deposited by the supplier/ their authorized Indian</p>		

**CENTRAL POLLUTION CONTROL
BOARD**

**Parivesh Bhavan East Arjun Nagar
Delhi-110032 India**



**INTERNATIONAL COMPETITIVE
BIDDING**

**SUPPLY, INSTALLATION & COMMISSIONING OF
NOISE MONITORING STATIONS FOR C.P.C.B**

BIDDING DOCUMENT

**DOC.NO A-19014/50/09-MON
MARCH, 2013**

PRESS-RELEASE

CENTRAL POLLUTION CONTROL BOARD
Ministry of Environment & Forests
Parivesh Bhawan, CBD-cum-Office Complex East Arjun
Nagar, DELHI - 110 032, INDIA

TENDER NOTICE

For supply, installation and commissioning of Real Time Ambient Noise Monitoring System for 35 locations

Sealed tenders are invited on behalf of the Member Secretary, Central Pollution Control Board from the manufacturer/supplier in India or abroad for the supply of Real Time Ambient Noise Monitoring Network in 7 cities (5 locations each) and Central Receiving Station at CPCB head Quarter at Delhi.

The tender document along with detailed specification of the instruments can be downloaded from CPCB website: www.cpcb.nic.in. The request for tender documents sent by post will be accepted upto 12/04/2013. Other detail is as follows:

- | | | |
|-----------------------------------|---|--|
| Sale of tender document | - | 12/03/2013 to 22/04/2013 on all working days between 11.00 AM to 5.00 PM |
| Pre Bid | - | 19/03/2013 at 12.30 P.M |
| Last date & time for submission | - | 23/04/2013 upto 02.00 P.M |
| Date of opening of tender | - | 23/04/2013 at 3 PM |
| Financial bid opening date & time | - | Will be intimated later to the technically qualified bidders |

(MEMBER SECRETARY)

COMMITTED FOR CLEAN ENVIRONMENT

CENTRAL POLLUTION CONTROL BOARD
Parivesh Bhawan, CBD-cum-Office Complex East Arjun
Nagar, DELHI - 110 032, INDIA

DETAILS OF TENDER NOTICE

No. A-19014/50/09-MON

Dated: 05/03/2013

Sub: Invitation of Tender for Purchase of Real time Ambient Noise Monitoring System

Sealed tenders are invited on behalf of the Member Secretary, Central Pollution Control Board from the manufacturer/supplier in India or abroad for the supply and installation of Noise Monitoring stations in seven cities (Five locations each in Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad and Lucknow) and Central receiving station at Head office, Delhi.

02. The tender document along with detailed specifications of the instruments can be obtained in person on production of authority letter of the firm or by post from the office of the Incharge PAMS Division, CPCB Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, DELHI - 110032 or downloaded from CPCB website www.cpcb.nic.in. The cost of tender document may be paid in Rupees through demand draft of Rs. 5,000/- in favour of "Central Pollution Control Board, Delhi", either for receiving by hand or attached with bid in case of downloaded from CPCB website.

03. The bid must be submitted in English, by the principal/their authorized suppliers.

04. The Earnest Money as indicated in Bid document must be submitted by the Bidder along with the Tender in the form of Demand Draft or Bank Guarantee drawn in favour of "Central Pollution Control Board" payable at Delhi (India). It should be either in Indian Rupees or in bid currency (equivalent amount as per the exchange rate prevailing). The Indian agent/representative should furnish an authorization letter from their foreign Principal supplier authorizing to deposit the EMD on their behalf.

05. The request for Competitive Bidding Document sent by post will be accepted strictly upto 12/04/2013. CPCB will not be responsible for any delay in receipt of tender document sent by post. Request received by post after above mentioned date will not be entertained at any cost. Other details are as follows:

Price of Tender Document:

By Hand	:	₹5,000.00
In case downloaded from CPCB website	:	₹ 5,000.00
By post	:	₹5,200.00 (including postal charges of ₹ 200.00. The request of competitive Bidding Document will be accepted upto 12.04.2013

Schedule Governing this tender is mentioned below:

Last date & time for	:	
i) Date of Sale of Tender	:	12.03.2012 to 22.04.2013 on all working days between 11.00 AM to 5.00 PM
ii) Pre-Bid meeting for discussion	:	At 12.30 pm on 19.03.2013 in the training hall, ground floor, CPCB, Parivesh Bhawan Delhi. All the intending bidders may attend the Pre-Bid meeting. Pre-bid queries indicating page number & relevant paragraph may be communicated by 19.03.2013 to cpcbnoise@gmail.com . Amendment if any, in tender document, may be seen on CPCB's website.
iii) Submission of Tender	:	Upto 2 PM on 23.04.2013
iv) Opening of Tender	:	23.04.2013 at 3 PM
v) Opening of Financial bid	:	Will be intimated later only to technically qualified bidder

1.0 INTRODUCTION

Central Pollution Control Board (CPCB) has established National Ambient Noise Monitoring Network and installed 35 Noise Monitoring Stations in India. CPCB is planning to augment the existing network with 35 new real time ambient noise monitoring stations. The Network will be extended in 7 cities of India (5 stations in each) consisting of 35 number of standalone unmanned remote noise monitoring stations/system. Sealed Tenders are invited on behalf of the Member Secretary, Central Pollution Control Board from Manufacturer/Suppliers in India and abroad for the supply of Noise Monitoring Terminal (NMT).

2.0 GENERAL TERMS AND CONDITIONS

- 2.1** The Tender Document is not transferable by the purchaser. The bid form in the tender document at Annexure- **I to XIV** may be used for bidding. Documents/forms downloaded from the website can also be used. Bids made on photocopy etc. will not be considered. Each sheet submitted by the bidder need to be signed including annexure with this document. The price bid must be in the form provided herewith at Annexure- **XI**.
- 2.2** The tender document in original can be bought from CPCB after submission of tender document fees. The tender document can also be downloaded from the website of CPCB and the tender document fee should be attached alongwith the Bid. The downloaded tender document without requisite tender fee will not be accepted and the bid will be rejected.
- 2.3** The Board takes no responsibility for delay or non receipt of Tender Document sent by post either way and also reserves the right to accept; or reject any or all the tenders in part or full without assigning any reason thereof.
- 2.4** No bid document will be sold after the last date of sale of Tender Document or between the extended period of opening date, if any.
- 2.5** The bidder is expected to examine all instructions, forms, terms and conditions and specifications mentioned in the bidding document. Failure to furnish all information required as per the bidding documents or submission of a bid substantially irresponsive to

the bidding document in every respect will be at the bidder's risk and may result in the rejection of its bid.

- 2.6 This call of tender does not bind the Central Board to place order. The Tenders submitted in response to this invitation may be rejected without assigning any reason.
- 2.7 The tender notice, tender forms, schedule of requirements, specification etc are also available on CPCB's Website www.cpcb.nic.in.
- 2.8 The Board at its discretion may extend the last date of submission of tender and opening of tenders. The final authority for acceptance of a Tender will rest with the Chairman, Central Pollution Control Board who does not bind himself/herself to accept the lowest tender and is vested with the authority to reject any or all of the tenders received without assigning any reason.
- 2.9 Documents, literature, diagrams/leaflets, samples etc., enclosed in the bid shall become the property of the Central Board without any payment.
- 2.10 The items have to be supplied in standard packaging.
- 2.11 In case, the date of opening of Tender is declared as Public Holiday, the Tender shall be opened on the next working day at the same time.
- 2.12 The bid shall contain no interlineations, erasures or overwriting words except as necessary to correct errors made by the bidder, in that case such correction shall be initialed by the person or persons signing the bid.
- 2.13 Late and delayed tenders will not be considered and shall be returned unopened to the Bidder.
- 2.14 It is advised that the outside suppliers should send the Tender through Registered Post. However, the local supplier may drop their Tenders in Tender Box kept in Central Board for the purpose. In no case Tender should be handed over to any employee of the Board.
- 2.15 Canvassing in any form will disqualify the Bid.

2.16 Request for the Tender Document for bidding through Fax, E-Mail and Tele fax shall not be entertained.

2.17 All the Tenders should be addressed to:

**INCHARGE PAMS DIVISION
CENTRAL POLLUTION CONTROL BOARD
'PARIVESH BHAWAN'
EAST ARJUN NAGAR, DELHI - 110 032, INDIA**

3.0 SUBMISSION OF BID/PROPOSAL

- 3.1** Technical proposals should be enclosed in a separate sealed cover superscribing the words “Technical Proposal for 35 Nos. Real time Ambient Noise monitoring Stations in India”.
- 3.2** The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by English translation of its pertinent passages. In such case, for the purpose of interpretation of the bid, English translation shall govern.
- 3.3** The bid must accompany Annexure-I to IX with Techno Commercial part of Bid and Annexure-X to XII with 'Price' part of the Bid duly filled in and signed by the Bidder along with the seal of the Firm. The supplier should attach a copy of financial bid (without cost/price figures) along with the technical bid to assess the item/components quoted in the bid.
- 3.4** The Bidders are requested to quote excise duty, import duty and total price of each instrument separately indicating the Govt. levies, freight, insurance, transportation charges and their installation charges to CPCB/Monitoring Locations. No C/D form will be issued against VAT. Necessary excise duty exemption certificate as applicable will be provided. The bidders are expected to examine the bidding documents carefully and are deemed to have received and read all documents. It shall be the responsibility of the bidder to request the copies of any missing documents. Failure to do so will be at bidder's risk.
- 3.5** Bid must be submitted by the Principle or Original Equipment Manufacturer (OEM) or Indian agent/distributor. If the bid is submitted by the Principal or OEM then they should have Indian agent/distributor for providing service during warranty and AMC.

- 3.6 It may be noted that mere quoting lowest rates will not entitle any firm to get the order. The quality of the item being offered, the past performance supply etc. will also be taken into consideration. Prior to award of purchase order the buyer can call any details, explanation regarding technical & financial aspect.
- 3.7 Pre-bid meeting will be conducted on 19.03.2013 at 12.30 pm in training hall, ground floor, CPCB, Parivesh Bhawan, Delhi to discuss the queries made by the bidders. Pre bid queries indicating page no. and relevant paragraph should be communicated by 18.03.213 to cpcbnoise@gmail.com. All clarifications shall be cleared in the pre-bid conference. Amendment if any, in tender document, may be seen on CPCB's website.
- 3.8 The Tender is to be submitted "single stage-3 envelope system" i.e. the first sealed envelope will contain Earnest Money , second sealed envelope will contain full information required to judge pre-qualification, complete details and specification of the instruments offered including the leaflets and catalogues, list of credentials with documentary evidence i.e., purchase/work order etc., Income Tax Clearance Certificate, PAN No., Vat/Sales Tax Registration No., Affidavit for not being black listed, Commercial Terms & Conditions etc. It shall be marked "Pre-qualifications, technical and commercial Bid for supply of 35 Nos Real time Ambient Noise monitoring Stations.

Based on information provided in first and second sealed envelopes, the bidders will be evaluated and the selected bidders will be asked for demonstration of instruments for 15 days which will be a part of proof of technology as mentioned in clause no. 5.

The third envelope will contain only price quoted by the bidder in the form given at Annexure -X to XII of this document and shall be clearly marked "Price Bid for supply of 35 Nos. Real time Ambient Noise monitoring Stations. After techno-commercial specification evaluation and successful demonstration of instruments as a proof of technology, price bid will be opened. All the above three envelopes must be separately sealed and shall be kept in one envelope bearing the address of Central Pollution Control Board and super scribed with bold letter "TENDER FOR 35 NOS OF REAL TIME AMBIENT NOISE MONITORING STATIONS- NOT TO OPEN BEFORE 23/04/2013 AT 3.00 P.M. The sender's address should be mentioned on all envelopes.

- 3.9 Technical part of the tender will be opened on due date and time i.e. at 3.00 P.M. on 23/04/2013 in the office of the Central Board in presence of the

- Representatives of the Bidders, who would like to be present. Opening of financial bid will be intimated later only to technically qualified bidder.
- 3.10** Firm has to make own arrangements to bring equipments to India for demonstration. No Custom duty exemption certificate will be issued by CPCB for demonstration purpose.
- 3.11** The validity of Tender would be for a minimum period of 180 days from the date of opening of Tenders. A Bid valid for a shorter period may be rejected by the Board as non responsive. In extension cases, the Board may solicit the Bidder's consent to an extension on the period of validity and the bid shall remain valid for the extended period mutually agreed for.
- 3.12** The rates should be quoted both in words and figures.
- 3.13** Arithmetical error will be rectified on the following basis:- If there is discrepancy between the unit price and total price that is obtained by multiplying the Unit Price and quantity, the unit price shall prevail and the total price shall be corrected. If there is discrepancy between words and figures, the amount mentioned in words will prevail.
- 3.14** Tenders not in proper sealed cover or received E-mail/Fax will not be entertained.
- 3.15** Conditional Tenders will be rejected without assigning any reason.
- 3.16** **Alternate Bid and options will not be accepted.**
- 3.17** The Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person duly authorized to the Contract. The letter of authorization should bear the signature of only the authorized person of the firm. All pages of the Bid, except for un-amended printed literature shall be initialed by the person or persons signing the bid.
- 3.18** Eventual suggestions for modification or subsidiary Tenders are principally not admissible.
- 3.19** The specifications are clearly mentioned in the document and the Bidder are requested to submit Bid only if their offer strictly comply to these specifications. Please note that no deviation in the required specification will be permitted. The

bidding for the instruments having different specification will be on Bidder's risk as the Board will not entertain such Bids. BIDS CARRYING THE STATEMENT LIKE "SPECIFICATION AS PER TENDER DOCUMENT" SHALL NOT BE ENTERTAINED. THE PRODUCT SPECIFICATIONS SUPPORTED BY TECHNICAL LITERATURE AND LIST OF USERS MUST BE ENCLOSED.

- 3.20** The placement of work order/purchase order will be according to technical evaluation of the Tender, successful demonstration and after consideration of its price worthiness.
- 3.21** The price to be given in the Tender are fixed prices, irrespective of rise in Materials prices till complete the delivery of items. No request in regard to increase in the price of instruments will be entertained after the submission of the tender. Taxes shall be at prevailing rate at the time of supply of the material.
- 3.22** **The supplier should attach a copy of financial bid (without cost/price figures) along with the technical bid to assess the item/components quoted in the bid. If this requirement is not met by the bidder, their bid will be considered as incomplete and would not be considered for further evaluation.**
- 3.23** Those items mentioned in Techno-commercial bid must be mentioned in financial bid alongwith corresponding cost in the same order. If there is difference in nos. of items, **the bid will be rejected.**
- 3.24** The nomenclature of the instruments and spares will be invariably same in Performa Invoice, Invoice, Packing list and in other relevant papers in case the Bidder is asked to supply the instruments against its offer.
- 3.25** With the submission of the Tender, the Bidder accepts the conditions of the Tender.
- 3.26** **The authorized Indian agent/Representative/ Indian supplier should have minimum two years continuous agency /partnership/joint venture/participation or collaboration with their principal foreign supplier. The documentary proof of such agency ship /authorization/MOU should submit alongwith the technical part. The bid of the firm does not contain the proof of such nomination/authorization as Indian agent will be rejected.**

- 3.27 Bidder ensures that technical specification shall comply and supported with technical brochure. In case, technical specification does not meet or found in their supported brochure, the bid will be rejected.**
- 3.28 Bidder must submit the bid in Performa/annexure provided by CPCB. In case, bidder doesn't submit the bid in said Performa/annexure, then it leads to disqualification.**
- 3.29** The installation of the instruments at the respective site is the entire responsibility of the supplier. It must be done either by the principal/supplier or their authorized agents strictly within duration specified in this document on the receipt of the instruments by the Board. The supplier or Agent should be in touch with the Materials Section of the Board to know the exact day of receipt of stores supplied/dispatched by them.
- 3.30** Each and every folio of the Tender must be signed by the Bidder.
- 3.31 The bidder should provide a complete list of spares, sensor and consumables required for five years for trouble free operation and maintenance of the instruments.**
- 3.32** The after sales service is most important to be considered for comparison of bids. The Bidder should be able to attend the system immediately and ensure trouble free operation of the system. The Bidder should provide full information of its local contacts in all the seven cities of India.
- 3.33** The list of Instruments/equipments, their approximate quantity and point of delivery is given at Annexure-XII & XIII respectively and the detailed specification of the instruments are given in the tender document. The quantity mentioned in the tender document may be increased or decreased at the discretion of the Competent Authority in the Central Board without assigning any reason.
- 3.34** The seller/Indian representative should quote a price for delivery of items at the stores of CPCB, Parivesh Bhawan, East Arjun Nagar, DELHI-110 032, INDIA. CPCB will provide **concessional** custom duty exemption certificate to local representative of the seller for the foreign manufactured items consigned to CPCB. The seller will have

responsibility of clearance of goods from custom after paying the mandatory custom duty and completing all necessary formalities for custom clearance. After custom clearance, the seller will transport the goods through CPCB stores to all the designated 35 sites in 7 cities as per **ANNEXURE XIII**. All the charges should be included in the price bid. The seller/local representative will have full responsibility to transport the system from CPCB store to respective 35 sites as mentioned in **Annexure-XIII**. All the local taxes and duties will be paid by the bidder.

3.35 The transportation charge for the goods should be quoted separately. Concessional Custom Duty & Excise Duty exemption certificate will be provided by CPCB. However, Road permit & all other taxes as applicable will be paid by bidder and that will be reimbursed as per actual by the purchaser on production of original document which will be paid after successful installation. Insurance of the instrument should be arranged by the bidder upto CPCB stores and further to respective sites.

3.36 Recurring charges of all 35 remote stations per year should be quoted in the price proposal. The cost of recurring charges for the first year will be added to calculate the lowest bidder.

Cost for recurring charges will be paid on yearly basis at the end of every year after the satisfactory performance of the stations.

3.37 The foreign bidders must indicate the following information in the technical bid as well as price Bid separately for each instruments /equipment quoted offered:

- a) Country of Origin
- b) Port of Shipment
- c) Name & Address of beneficiary Bank, Branch Name with Account No., IBAN & Swift code
- d) Minimum delivery period
- e) Whether transshipment /partner shipment is required or not.
- f) Agency commission, if any payable to the Indian Agent, their complete address, telephone & Fax number. The amount of agency commission should be clearly mentioned and it will be paid to authorized local agent in Indian Rupees.

- 3.38** Foreign Principals/their authorized Indian Agent shall intimate the buyer regarding the date of shipment well in advance. A copy of the invoice documents, air way bill, packing list, certificate of country of origin may be forwarded to the purchaser by fax/ E-mail immediately after shipment so that concessional custom duty exemption certificate can be issued in time to avoid demurrage charge.
- 3.39** Important Bank Charges: Two months time for shipment and further 21 days for negotiation will be given. All Bank charges inside the country (in India) will be buyers account and all Bank charges outside the country should be borne by the supplier/beneficiary. The bidders may note this and quote the price of the instrument/equipment accordingly. In the case of Foreign Suppliers, they will have to ensure shipment of the consignment as per the validity of the letter of credit established in this regard. In case of extension of supply date is sought, the bank charges towards the amendment of L.C. should be borne by the Supplier.
- 3.40** The prices must be quoted item wise i.e basic price, packing forwarding, handling installation charges etc. The charges must be quoted clearly and not in vague terms like “As Actual” “Approx” etc.
- 3.41** In case of Indian Suppliers, the instruments are to be dispatched to the respective places directly and to be installed there, by the supplier under intimation to, CPCB Office at Parivesh Bhawan, Delhi-32. The packing, forwarding, charges must be quoted according to the place of delivery as mentioned in the schedule. The Supplier shall be liable for any damage, theft or loss during the transit. Please note that Performa Invoice must be separate for each instrument /item.
- 3.42** In the case of proprietary item, the proprietary certificate issued by the principal/manufacturer should be attached along with the technical bid. In that case, the bid of the sole distributor will only be considered. A copy of the latest supply order (showing details of price) executed to any Central Govt. Departments/Semi Govt. Department/Undertaking/Autonomous Bodies or any reputed firms in India or abroad should be attached along with the price bid.
- 3.43** If the instrument supplied is found defective/unsatisfactory condition/short

supply/other than specifications in the Purchase Order, the same will have to be replaced at the suppliers risk and cost. No freight and other charges for replacement will be paid by the Board.

- 3.44** The warranty/guarantee of the instrument/equipment should be inclusive of 1 year onsite warranty. Additional charges for 2 year onsite warranty should be mentioned in the price proposal. CAMC proposal for 2 years after the expiry of 3 year of warranty should be mentioned in the price proposal as AMC charges for 4th year and 5th year.
- 3.45** Total cost of 2 year additional warranty and AMC charges for 4th and 5th year will be added to calculate lowest bidder.
- 3.46** **The Firm whosoever getting the award of supply/work should execute a Pre-contract Integrity Pact with CPCB. The Pre-contract Integrity Pact format is attached alongwith the tender document at Annexure- XVI.**
- 3.47 MOST IMPORTANT**
PLEASE NOTE THAT FIRST ENVELOPE MUST CONTAIN EMD AND ANNEXURE-I to IX OF THIS DOCUMENT
SECOND ENVELOPE SHOULD CONTAIN “TECHNICAL/COMMERCIAL BID
THIRD ENVELOPE SHOULD CONTAIN: ANNEXURE-X to XII i.e. PRICE BID.
- PLEASE NOTE THAT THERE IS NO NEED TO ENCLOSE THE ENTIRE TENDER DOCUMENT (SUPPLIED BY THE BOARD) WITH YOUR BID. ONLY ANNEXURE-I to XII NEED TO BE ENCLOSED AS PER INSTRUCTION STIPULATED IN RELEVANT PARAGRAPHS OF THIS BID.**
- 3.48** An Earnest Money Deposit of Rs 25,00,000/- (Rupees Twenty Five Lakhs Only) should be deposited in the form of demand draft or **Bank Guarantee** valid till validity of the tender in the favour of “Central Pollution Control Board, Delhi” and should be enclosed alongwith the proposal.
- The earnest money of unsuccessful firms shall be returned in the same forms if:
- i. The firm failed to qualify in technical evaluation.

- ii. The firm technically qualified but not the lowest bidder in financial evaluation after the financial evaluation.
- iii. The earnest money of successful firm shall be returned without any interest after the successful installation and commissioning of the system.

The proposal should be submitted to the “Incharge PAMS Division” Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Shahdra Delhi-32 latest by 2:00 pm on 23.04.2013.

4.0 ELIGIBILITY CRITERIA FOR BIDDERS

- The bidders must have ISO Certification or equivalent.
- In case bidder is not OEM, the bidder must attach the OEM authorization certificate to quote/submit the bid on behalf of OEM. The bidder must also submit certificate of system support from OEM.
- The firm should have expertise and experience in establishing Observational Monitoring Networks for noise, atmospheric or environmental observations for reputed agencies in India/abroad. The experience should be supported with the copies of order and proof of implementation of projects.

The bids will be rejected in case bidders do not meet all the above qualifying conditions without any further processing.

5.0 PROOF OF TECHNOLOGY

The bidders within one month of submission of proposal must install or demonstrate from the existing installation a field station as quoted by them. Also integration with the existing central receiving station as detail in Para 35 of the tender document should also be demonstrated. The bidder can quote for their own central receiving station with the software and hardware if required and demonstrate all features and functions as per schedule of requirements including integration with the existing Phase 1 stations, if possible as a proof of technology. Demo of the system offer by the bidder should be free of cost. If the bidder fails to give demo within the specified period, their bid will not be considered further. CPCB will not be responsible for any changes for Demo.

Bidder whose system has already been successfully demonstrated in CPCB in Phase I need to demonstrate again for integration with existing central station.

All the operational functions of the system will be tested as per specifications for a minimum period of 15 days. During the period of testing the remote stations should be unattended and must work without any human interventions. In case of any failure of the system for more than 24 hours continuously (down time of the system should not be more than 24 hours), the systems will be technically rejected. The bidders failing to meet the condition of proof of technology as mentioned above will not be considered for further evaluation and their bid will be rejected.

6.0 TRAINING TO CPCB AND SPCBs OFFICIALS

Training will be conducted in two phases:

- (i) Familiarization programme under which 11 officials of CPCB/SPCBs will be given in depth training for 5 working days at OEM works. Air travel, boarding, lodging and per diem will be borne by successful supplier at (OEM) works. The bidder should submit the day wise training schedule and the subjects which will be covered under this training.

- (ii) The manufacturer / supplier should provide in-depth training for 3 working days for all the 35 sites which include 1 day in-house training on handling of software and 2 days in field training on hardware and software to 25 CPCB/ SPCBs officers. The training should cover installations details including operation and maintenance of the system and about all software aspects in respect of Remote & Central Receiving stations. This training will be conducted in Delhi for all the SPCBs.

7.0 WARRANTY AND MAINTENANCE

7.1 The manufacturer should provide a comprehensive warranty of at least three years (first year free warranty + two years extended warranty) after commissioning of the system in the field. The manufacturer should take on the work of servicing and routine maintenance of field equipment once in a month. Response time for rectifications of faults in the field Remote station equipments should not be more than 48 hours.

7.2 Payment

Two year extended warranty payment will be released on yearly basis only after completion of first year free warranty.

7.3 Penalty for delay in O&M and capturing of data

1. If the down time is more than two days, the warranty period will be presumed to be extended by a period twice the down time.
2. If data transmission rate for a station is found to be less than 95% in a year inclusive of extended warranty days, there will be a proportionate deduction from the balance 20% amount/bank guarantee (equivalent to each station) which is to be released after warranty period.

8.0 COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC)

8.1 Vendor must quote for the CAMC separately. Vendor will be responsible for the communication of data generated from remote station to central receiving station and other nodes during warranty and CAMC period. Bidder will be responsible for operation and maintenance of the instrument therefore, Bidder must quote for CAMC for 2 years along with their offer which will start after expiry of 3 years of warranty.

8.2 Payment condition for CAMC

CAMC payment will be released against bank guarantee on yearly basis.

9.0 CALIBRATIONS

- a) Authorised, Independent and Accredited Lab Calibration:** Vendor must provide Calibration test report from an Authorised, Independent and Accredited Lab according to IEC 61672-3:2006 acoustic standards for all individual 35 Noise Terminal. This calibration test report is a must for acceptance of the system.
- b) Internal Self calibration:** The system should perform calibration test to check the whole noise measurement system by means of generating remotely a well known signal at microphone and proper operation of each unit. For this purpose the outdoor microphone should be equipped with a built in electrostatic actuator which should stimulate a pre defined noise level on the diaphragm of the microphone. This should be automatically used to check the calibration of the sensor and the result should be displayed for each site. This check should be repeated on daily basis to assure the quality data.

- c) **External comparison calibration** : The vendor should use the external system to do the comparison calibration twice in a year. The vendor should quote for one hand held calibrator as per the specification mentioned in the tender document.
- d) **External acoustic calibrator** : The vendor should also keep an external acoustic calibrator and should use the same to calibrate the sensor in CPCB when the sensor calibration is not within the limits. The vendor should quote for one External acoustic calibrator as per the specification mentioned in the tender document.

10.0 DOCUMENTATION

The manufacturer should provide detailed manuals for operation, trouble shooter, preventive materials, servicing and maintenance of each sub system including all block diagrams and detailed circuit diagrams. The catalogues of all the vital components used in the system should also be provided. All manuals should be given in printed form also.

11.0 COMPLIANCE / NON-COMPLIANCE STATEMENT

The tenderer shall submit a detailed item-wise compliance / non-compliance statement referring para-wise to the requirements given in this document, for precise evaluation of tender and for any future reference. The compliance statement shall be supported by original brochure(s) of the equipment or sub component from the manufacturer. In case the original brochure is silent on any part of tender specification, it shall be supported by an undertaking by the manufacturer, if claims complied. The technical specifications and other requirements contained in this document are essentially required by the indenter. However, reasons for non-compliance, if any, for certain limited paras, or even sub-paras of the document may also be given by the tenderer. Silence on any part of the commercial or technical specification or failure / omission to provide any such details will be treated as non-compliance. All non-compliance of specifications, even of minor deviations should be clearly brought out.

12.0 RELIABILITY

In general, it is desired that sensors should be capable of operating for 5 years without physical technical intervention. Sensors and Data logger system should have built-in performance checks and indicators which should be utilized whenever possible.

13.0 SPARES AND CONSUMABLES

To assure the maximum uptime during warranty and CAMC, the vendor should keep the inventory of the spares to the tune of minimum 10% of the equipment supplied. **CPCB would have the right to audit the inventory of spares at any given time during the tenure of the contract in the good condition and performance of the system.**

14.0 INSTALLATION, SYSTEM INTEGRATION AND COMMISSIONING

14.1 All the equipments shall be installed and brought into suitable conditions for operation by the supplier at the sites designated by the Board. The supplier shall make all the necessary and proper adjustments and arrangements, including the utility supplies and connections, foundation and erection (including fencing against possible damage of any animal/creatures) works in order to install the Equipment in adequate conditions for operation.

14.2 Only the best installation practices are to be applied, and all the installation works must be done to the satisfaction of the Board and the supplier shall carry the works in a perfect and qualitative works man aptitude. The installation shall be planned and systematic, carry out in such a way so as not to damage installation materials and the Equipments.

14.3 All the installation Equipments, tools, materials, labour, logistics and all the other requirements for installation shall be provided by the Supplier.

14.4 Bidder shall depute Engineer/supervisor for onsite assembly, installation, commissioning and start up of the supplied equipment. Bidder should offer the complete system with complete turnkey implementation including installation, testing and commissioning to the satisfaction of CPCB officers. The equipment will be installed at CPCB's identified sites. The civil work will depend upon the requirement of the site. Height of Mast should be 4 (four) meters and should be triangular lattice mast as per the field layout drawing. The mast and the installation accessories should be galvanized or should be of stainless steel for external installations.

15.0 INSPECTION AND TEST

15.1 The Board shall have the right to inspect and to test the Equipment to confirm their conformity to the Specifications without any extra charge to the Board by the Supplier. The Supplier shall notify the Board in writing, in a timely manner, of the schedule of inspection and test.

15.2 The supplier shall carry out the performance test to inspect and witness the function of each of the equipment supplied under the awarded package at site. In case the Equipment for performance test requires the supplemental and/or supporting Equipment, the supplier shall carry out the performance test including such Equipment.

The supplier shall submit the performance test report to the Board. Factory Acceptance Test (FAT) and Site Inspection Test will be as per requirement of CPCB. The OEM training should be conducted before the dispatch of equipments so that the officials going for OEM training program can be the part of the FAT conducted by the OEM for approval and quality assurance.

16.0 TAX AND DUTIES

The bidders should indicate clearly the duties and taxes applicable to central govt. department on goods and services. In case of imported stores, the custom duty will be paid by bidder and it should be mentioned in price bid. Concessional custom duty exemption certificate will be issued by CPCB. The bidder will arrange the custom clearance of goods.

To compare the bids all the currencies will be converted to INR as per the RBI currency conversion rate applicable on the date of price bid opening. The concessional import duty applicable will be added to the prices to compare with the bid quoted in INR. As per Government of India rules VAT /CST will not be added in the price to calculate the lowest bidder.

17.0 PAYMENT CONDITION

17.1 For Foreign bidders

The foreign bidders should quote the prices in foreign currency. In case they have components and services of Indian origin, the same may be quoted in Indian rupees. The offer of goods and services of Indian origin will not be acceptable in foreign currency.

The 100% irrevocable LC will be open in the name of the foreign bidders for the stores of foreign origin.

- a) 70 % payment will be made on delivery of equipments to stores of CPCB.
- b) 20 % payment after successful installation and commissioning.
- c) Balance 10 % payment after successful completion of the warranty period or on submission of bank guarantee equivalent to 10% which will be valid for the period upto the expiry of extended warranty period.

17.2 For Indian Bidders:

- a) The 70% payment will be made on delivery of equipments to stores of CPCB.
- b) The 20 % payment after successful installation and commissioning
- c) Balance 10 % payment after successful completion of the warranty period or on submission of bank guarantee equivalent to 10% which will be valid for the period upto expiry of extended warranty period.

18.0 Identification of system and Sub system

The supplier shall affix the name plate with following description in English on all the Equipment:

- 1) Name of the Equipment
- 2) Manufacturing date
- 3) Production serial number
- 4) Equipment model no.
- 5) Name of the manufacturer

19.0 PACKING & SHIPMENT

19.1 Packing

19.1.1 Transportation by air cargo

The supplier shall pack and transport the equipment in the double carton, approved by airline and deliver separately to the designated Site in complete packed condition.

19.2 Shipment

The supplier shall be responsible for the delivery of the equipment to each site designated by the Board and for the coverage of air cargo charges, freight, and insurance premiums up to handle over the Equipment at sites, inland transportation and temporary storage etc.

19.2.1 Notification and Submission of Documents

Upon shipment, the supplier shall notify the Board:

- 1) Contract Number
- 2) Description and quantity of the Equipment
- 3) Name of the air cargo
- 4) Number and date of bill of lading and airway bill
- 5) Date of shipment, port of discharge, expected date of departure and expected date of arrival
- 6) Invoice amount of shipment

19.2.2 Unloading and Custom Clearance

As per clause number 3.28 and 3.32

19.2.3 Inland Transportation

The Supplier shall be fully responsible for the delivery of all the equipment to the Sites. The Supplier shall arrange at his option and cost of transportation from the port of entry to each site for the equipment of foreign origin.

19.2.4 Handling and Storage

The supplier shall protect the Equipment from any damage and avoid overloading. Particular attention shall be given to the perishable Equipment and those which must be kept dry, cool or from exposure to direct sunshine and moisture. In case a part of the Board's facilities is necessary to be occupied by the Supplier for temporary storage or installation use, the Supplier shall obtain the written approval from the Board for temporary occupation and protect facilities against any damages. Charges Payable for this facility to the Board for this shall be fixed by the Board.

19.2.5 The supplier shall mail the following documents to the Board

Equipment of Foreign Origin:

- 1) Copies of the supplier's invoice showing the Equipment's description, quantity, unit price and total amount.
- 2) Six(6) copies of bill of lading and airway bill marked "freight prepaid". A second copy of the bill of lading with air-way bill marked "freight prepaid" originally signed by the shipper should be provided by the supplier directly to the Board immediately after shipment.

- 3) Copies of the packing list identifying contents of each package.
- 4) Insurance certificate.
- 5) Supplier's and/or Manufacturer's warranty certificate
- 6) Certificate of country-of origin.

The above documents shall be received by the Board at least one week before arrival of the Equipment at the port or place of arrival for issue of concessional exemption certificate and if not received, the Supplier will be responsible for any consequent expenses.

20.0 Contract Performance Security

20.1 The supplier within thirty (30) days from the date of notification of award shall furnish a Bank Guarantee from a reputed Indian or Foreign Commercial bank having license to do business in India to the Board towards performance guarantee for an amount equal to ten (10) percent of the total Price under the contract for faithful and due fulfilment by the Supplier of all obligations under the terms and conditions of the Contract. The bank guarantee should remain valid till the commissioning of the project.

20.2 Return of Contract Performance Security

The performance security will be discharged by the Board and returned to the Supplier not later than 60 days after successful commissioning and acceptance of the project.

21.0 DELIVERY OF EQUIPMENTS

The complete delivery of stores must be completed within 2 months of placement of order/acceptance of order. The installation of all the stations must be completed within 2 months from date of receipt of equipment at CPCB store.

22.0 DELAYS IN THE SUPPLIER'S PERFORMANCE

22.1 Delays in the Supplier's Performance

Delivery of the equipment and performance of the works shall be made by the supplier in accordance with the time schedule.

22.2 Notification of Delay

If at any time during performance of the Contract, the supplier and/or the manufactures should encounter conditions impeding timely delivery of the Equipment and performance

of the works, the supplier shall promptly notify the Board in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Board shall evaluate the situation and may at its discretion extend the supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the Board and the supplier by amendment of the contract.

22.3 Liability of Liquidated Damages

Except as provided under Clause 28 of document, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to clause 23 hereunder, unless an extension of time is agreed upon pursuant to sub-clause 22.2 here above without the application of liquidated damages.

23.0 LIQUIDATED DAMAGES

23.1 Subject to clause 28 of document, if the Supplier fails to perform the works within the period, the Board shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage as mentioned in point no. 23.2 and 23.3. Once the maximum is reached, the Board may consider termination of the Contract pursuant to clause 25 of document.

23.2 The supplier shall pay to the Board as liquidated damage a sum equivalent to half (0.5) percent of the unit price in the Contract Price for each of the equipment undelivered per week delayed.

23.3 Maximum Deduction

The total liquidated damages payable to the Board shall not in any case exceed Ten (10) percent of the contract price.

24.0 Suspension Of Work

The Supplier shall not suspend the whole or any part of the Works without notice to the Board in writing. The Supplier thereupon shall do all possible endeavours to reduce any expenses or costs resulting from the suspension. Such suspension shall not nullify the contract.

25.0 TERMINATION FOR DEFAULT

25.1 Termination for Default

The Board, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:

1) If the Supplier fails to perform any or all of the Works within the period or extension thereof granted by the Board pursuant to Clause 22 of the document.

Or

2) If the supplier fails to perform any other obligations under the contract.

25.2 Liability for Excess Cost for Unperformed Work

25.3 In the event the Board terminates the Contract in whole or in part pursuant to Sub-clause 25.1 here above the Board may procure at the risk and cost of the supplier, upon such terms and in such manner as it deems appropriate, the equipment/works similar to those undelivered / unperformed and the supplier shall be liable to the Board for any excess costs for such similar equipment / works. However, the Supplier shall continue performance of the Contract to the extent not terminated.

26.0 Settlement of Dispute, Arbitration

26.1 All disputes or differences arising out of or in connection with the contract and supply of any item/equipment assigned under the same (whether during the progress of the works or after their completion, determination, abandonment or breach of the contract) shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The Arbitral Tribunal shall consist of two (2) arbitrators appointed by the Chairman, Central Pollution Control Board. It will not be an objection to any such appointment that the arbitrators are the Government Servants and had any interest in the Board or the contract entered into directly or indirectly. In all cases, the arbitrator shall state reason in their decision, in writing the amount of claim in dispute is Rs. One lakh/- and above, subject as aforesaid the provision of the Arbitration and Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. Arbitration proceeding shall be held at Delhi/New Delhi, India and the language of arbitration proceedings and that all documents and communication's between the parties shall be in English equally by both the parties.

26.2 It is a term of the contract that the party invoking the arbitration shall specify the dispute(s) to be referred to the arbitration under this clause together with the amount or amount claimed in respect of each such dispute.

26.3 It is also a term of the contract that if the supplier (s) do not make any demand for arbitration in respect of any claim (s) or dispute in writing after 90 days of receipt of the final bill of payment, the claim of the supplier will be deemed to have been waived and absolutely barred and the Board will be discharged and released of all liabilities under the contract in respect of these claims.

27.0 LAWS AND REGULATIONS

The formation, validity and performance of this Contract shall be governed as to all matters by and under the laws and regulations of India and courts of Delhi shall have exclusive jurisdiction in all matters arising under this contract. The Supplier shall respect and abide by all laws and regulations of India and shall make its best effort to ensure that the personnel of the Supplier and their dependents, while staying in India, shall respect and abide by all laws and regulation of India. The Supplier shall protect, absolve and indemnify the Board, and their representatives from any claim, loss or damage arising from any non compliance alleged or proved, without claiming them for payment.

28.0 FORCE MAJEURE

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 frost, floods, riots and acts of usurped power. A notification to this shall be given by the Vendor to the buyer. In the event of delay due to such cases a length of time equal to the same period will be given to vendor.

29.0 INJURY AND DAMAGE

29.1 Injury or Death of persons

29.2 The Supplier shall be liable for and shall indemnify the Board 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 Board, or of any person for whom the Board is responsible.

29.3 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.

30.0 ROYALTY AND PATENTS

30.1 The Suppliers shall pay all royalties and license fees for the use of any patented item, whether it may be an invention, method, arrangement, article, process or appliance used in connection with the performance of the Contract. The supplier shall indemnify and save harmless the Board against any and all costs, damages and expenses of any nature or kind whatsoever which may arise out of or result from a claim by any person, firm or corporation that the manufacture, purchase, use of sale of any of the inventions, methods, arrangements, articles processes or appliances used in connection with the performance of this Contract infringes any patent of such other rights. The Supplier shall, at the request of the Board, defend the Board against any suit brought to enforce any such claim at the Suppliers expense.

30.2 In case any such patented item used on or in conjunction with the works is in suit held to constitute and infringement of its use enjoined, the supplier shall either secure for the Board the right to continue using the said item by suspension of the enjoinder, by procuring for the Board a license or otherwise, or will replace such items with a non-infringing item or modify it so that it becomes non-infringing or with the Board's approval remove the said enjoined item and refund to the Board the sums paid thereof.

31.0 EFFECTIVENESS

This Contract shall come into force and effect on the date of the Letter of Award and shall be in force until the Works have been completed and all the payments have been made to the Supplier, except the obligation of the warranty period by the Supplier.

32.0 CPCB reserves the right to increase the number of items within period of 12 months of placement of the original order with same commercial and technical terms.

TECHNICAL SPECIFICATION

33.0 SCOPE OF PRESENT TENDER ENQUIRY

CPCB has planned to augment the Real Time Ambient Noise Monitoring Network with additional 35 stations with GSM/GPRS/3G modem for transmission of data to the central receiving station. The Noise Monitoring Stations shall provide real time data through GSM/GPRS/3G network at scheduled interval and as and when requested by the users. Each Noise Monitoring Station should be connected and capable of transmitting data to central receiving station at CPCB Head Quarter, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, DELHI - 110 032, INDIA and other Zonal Offices/ State Pollution Control Boards through Central Receiving Station. Basic Network Architecture and Layout is shown in Annexure-XIV. 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.

34.0 Existing CPCB Network

34.1 Detail of existing hardware

Central Server – The central server installed in CPCB is designed to handle data from 200 plus field stations. The central server is rack mountable with dual hot standby secondary server. Both the servers are active and store the data in the SQL database using Geonica application. The specs of the hardware are

- 1) Primary and Secondary servers: HP Proliant DL 180 (2 numbers) Dual redundant power supply, mounted in a 1000mm X 800 mm X 42U rack
- 2) Web Server : HP Proliant DL 180 (1 number) with similar specs
- 3) 19" TFT make HP
- 4) HP Laserjet 1312nfi MFP
- 5) APC 10 KW online UPS with 32 sealed maintenance free batteries
- 6) Analysis Software with full graphics display, communication management and database generation for Central Receiving Station GEONICA SUITE consisting of TELETRANS-W4K / DATAGRAPH-W4K / FLASH READER-2G
- 7) Web Server Software Package WEBTRANS *UBIQUITAS* Internet Platform
- 8) 42 Inch Plasma screen for data display

34.2 Detail of database : The following parameters are stored in the existing data base

S. No.	Description
1.	Zone Category(Silence, Residential, Commercial, Industrial)
2.	Longitude
3.	Latitude
4.	Height
5.	LAF/S and LCF/S (Avg. Complete)
6.	LAF/S and LCF/S (Instantaneous)
7.	Lpeak
8.	Lpeak-day
9.	Lpeak-night
10.	Leq A Day
11.	Leq A Night
12.	Leq A Day Min
13.	Leq A Night Min
14.	Leq A Day Max
15.	Leq A Night Max
16.	Leq C Day
17.	Leq C Night
18.	Leq C Day Min
19.	Leq C Night Min
20.	Leq C Day Max
21.	Leq C Night Max
22.	L10
23.	L90
24.	Battery Average
25.	Remote system Noise Processor self-test and status bits

The other derived units are calculated by the system for display as and when required

34.3 Detail of webserver and website

Webserver : The web server hardware is similar with primary and secondary server specifications. It also shares the data base from the primary and the secondary server. The

website www.cpcbnoise.com is operational on the webserver using the Webtrans Ubiquitas application provided by Geonica.

35.0 Overall Requirements Of Real Time Ambient Noise Monitoring Systems To Be Supplied

There is an existing network of 35 stations with CPCB which transmit the data to the central server. The new additional sites will transmit the data to the existing server using GSM/GPRS communication.

The vendor would be responsible for the supply, installation and integration of new 35 sites with the existing server. Vendor may visit the existing installed system and responsible for the integration of said systems.

If the vendor feels that their systems are not compatible with the existing setup of server and software, they should quote for an additional rack mountable hot standby servers, webserver, UPS and the required software for completing the network. The data base of the new system should be configured in Microsoft SQL so that it can be augmented with the existing database. The new system must be compatible and seamlessly integrated with the existing Phase 1 central and remote stations without any modification of existing Phase 1 system.

- 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, high humidity coastal conditions and high temperature desert conditions.
- 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 working in Raid 5 and should be used for incremental backup of the existing and new database.
- 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 all Zonal Offices and State Pollution Control Boards. Vendor should provide a web enabled software to distribute the data and products to authorized users with highly secured mode.
- Type of reports to be generated from Central Receiving Station:
 - (i) Leq (Day time) : 06 AM to 10 PM - Daily
 - (ii) Leq (Night Time) : 10 PM to 06AM - Daily
 - (iii) Ln10, Ln90 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) Detailed format is attached at Annexure XV

36.0 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 as well with an integrated GSM/GPRS the Noise Monitoring Terminal.

The remote station should allow the connection of other meteorological sensors whose measurements can contain interesting correlations with Noise Levels (e.g. pollution, cars counters, wind sensors, etc.).

36.1 General Specifications of Noise Monitoring Terminal (NMT) :

NMT 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 (2002-05) Class 1
- (ii) Range : 230v AC±10%

- (iii) Power Back up : Power back up should provide complete power autonomy to the field stations with telemetry enabled for minimum 10 days without charging the internal battery or either by Solar panel or by power supply. Complete power budget calculation to be provided with the technical bid to support the uninterrupted power supply.
- (iv) Time weighting : Fast, Slow(IEC 6167 21 :2002) :
- (v) Frequency /weighting : A and C
- (vi) Dynamic Span : 110 dB(A) or more
- (vii) Noise floor : < 18 dB (A)
- (viii) Temperature : -10⁰C to +50⁰C
- (ix) Memory : Storage of all the above measured and stored data for at least 1 month at 1-second acquisition rate
- (x) Calibration : Automatic Calibration
- (xi) Resolution : 0.1 dB (A)
- (xii) Display : High viewing angle, high brightness, alpha numeric display with at least 4 lines per 20-character LCD and 18-key keypad for onsite service and maintenance purpose.
- (xiii) Operating Temperature Range -10⁰C to +50⁰C
- (xiv) Humidity Range for external devices 100% condensing
- (xv) Humidity range for internal devices 95 % RH Non - Condensing
- (xvi) Communication ports RS232, RS422, RS485, USB

- (xvii) Sampling Rate : Short Leq time history user selectable from 125ms, 1 second or 2 second etc. Leq, Lmax. Ldn and Ln periods adjustable between 1 minute and 1 hour (The sampling rate should be Programmable independently for each channel)
- (xviii) Measured and Stored data :Leq, Lmax, Lmin, Lpeak, L10, L90 & L50. Short Leq time history, Measurement time and date.Actual time and date (accurate to 12 seconds/month)
- (xix) Number of Input Channels : 10 or more (without taking into account comms ports)
- (xx) Analogue to Digital Converter Resolution if applicable : 20 bits or better (preference will be given to better resolution)
- (xxi) Telemetry/communication : The NMT should have provision for interfacing with following type of communications:
GSM /GPRS/CDMA
Ethernet/PSTN
- (xxii) Internal Clock Accuracy : 12 seconds/months or better
- (xxiii) Programmability : Fully Programmable. All functions must be programmable from remote access or direct from the instrument vendor or CPCB
- (xxiv) Power Requirement : Low power consumption
- (xxv) Hardware Diagnosis : Internal Noise Processor with embedded full hardware diagnosis through HyperTerminal like menu. This allows doing a complete onsite hardware test that includes power supply, memory, communications, analog and digital internal circuits

Note: Vendor should specify the data transfer rate of the system (preference will be given to faster data transfer rate)

36.2 Specification for Enclosure for Remote Stations:

- Weatherproof cabinet : The robust, durable, weatherproof cabinet with IP-65 protection
- Architecture (indicative) : The cabinet with required dimensions of 600x200x130 and lighter in weight.(Dimensions are indicative so that bidder may not offer a big size enclosure which not suitable for mounting on mast)
- Security : Should be supported/equipped with standard sensors to check the unauthorised intrusion and have ability to

	produce telecommunication alarm if the enclosure has been opened.
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.

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

36.3 Specification for Outdoor Microphone:

Standards	IEC 61672-1(2002-05) Class1		
Sensitivity	50-60 mV/PA		
Response Type	1/2" Pre-polarized 0° (Vertical) / 90 ° (Horizontal) incidences.		
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	100% RH (Condensing)	
Humidity Range	internal	95% RH (non condensing)	
Range	20- 140 dB (SPL)		
Frequency response	IEC 61672 Class 1		
Output connector	Compatible with NMT		
Pole adapter	Suitable for instrument monitoring		
Accessories Required	Bird spike, wind screen, Protected Extension cable		

36.4 Power Source at Remote Station

The external battery should be charged through Solar Panel and optional from 220 Volt 50 Hz, AC Power supply. The power backup should be sufficient to support the operation for remote terminal at least 10 days without charging. This should be supported with the power budget calculations. Vendor must quote for solar panel, external battery (65AH minimum) and the solar charge controller for all 35 stations. The external battery should

be installed in the NEMA 4 Enclosure on the Mast with lock and key as per the proposed layout drawing in Annexure XIV.

For locations with mains and solar panel, the Noise Terminal must be able to work with both sources connected at the same time. The Noise Terminal should be able to automatically switch from mains to solar power or to the internal battery during night.

36.5 Laptops - 02 no

02 nos of laptop will be required for data abstraction from remote station (in case of telemetric communication failure). Laptop configuration is mentioned below:

Make/company	:	HP/Lenovo/Dell or touch screen
Operating System	:	Windows 7/8 or better at the time of delivery
Hard disk capacity	:	1 TB or more
RAM	:	4 GB or more
Processor	:	3rd generation Intel® Core™ i7-3517U or better at the time of delivery

37.0 LCD Scrolling Display System- 35 Nos.(Number can be increased)

Scope of Work: The data is collected from all the existing 35 stations every 10 minutes and will also be collected from new proposed 35 stations in similar interval. Public awareness is very important to reduce the noise pollution. CPCB needs real time public dissemination and display systems 35 numbers (5 systems in each city). These displays will be installed indoor in state pollution control boards office, public places like railway stations, ministries, Govt. hospitals and other mass transit terminals like Airports, bus terminals etc. The sites will be provided and identified in consent with the state boards at the time of installation.

Real time/ Near Real time noise pollution data of all the 10 stations (5 existing and 5 new) installed in the city to provide the current information of Noise pollution levels. The data will be picked up from the CPCB server through GPRS modems and displayed on 40" wide screen TFT screen. The visibility of the displayed data and information should be more than 40 meters. The clarity of display should be designed for mass viewing.

CPCB have right to order any amount/number of LCD scrolling display systems within amount of 35 nos.

System Requirement: The system should consist of **standard 40" wide TFT with HDMI input**. The noise data and information should directly collected by the **embedded system through in built modem**. The data is fetched by the system from the CPCB Sever, which works 24 x 7. The data should be updated every 10 minutes and at each display system

through TCP/IP protocol by embedded system using HDMI port to assure quality display. The system design should rugged to with stand the power fluctuation as no UPS facility will be provided.

General Hardware

Make	LG/Samsung/Sony or any other
Size	40 inches TFT display of standard make
Operating System	Embedded OS
Display language	English
Connection	HDMI Input
Application	Outdoor/Indoor
Mounting	Wall mounting/roof/grill/pole
Data Connectivity	With CPCB Server located at CPCB headquarter
Power Supply	Normal 220V/50 Hz power supply
Software	Software embedded in the flash drive and should not be effected by the sudden switch off and on of the system
Cables	No Visible cable except power cable.
Primary Interface	GPRS/3G modem linked from Central Server
Software	Software used for LED scrolling display must show real time values of Noise Monitoring stations.
Communication	The system is supplied with an inbuilt SIM/GPRS. The bidder should add the GPRS charges for all the 35 displays for 4 th and 5 th year in the respective AMC charges. The recurring charges should be quoted on yearly basis for all the 35 systems. The cost of first year receiving charges will be taken in account for price comparison.
Site Installation	The display should mounted on the wall or on a roof hanging frame (depending on the site condition). The system should works on standalone mode without any cabling except power cable

38.0 Display features

- The screen windows can be customized as per specifications
- The Visual cab be played on both static and dynamic mode.
- In dynamic mode the standard refresh rate is 15 seconds in sequence for selected stations
- Refresh rate is under configurable from 5 to 30 seconds

- The standard display parameters are current Noise level, Maximum, Minimum, Average Leq of the displayed stations.
- Display of the parameters can also be provided on demand.
- The display header and footer can be customized to show the customers identity, logo as per user requirement
- In the bottom of the screen rolling display can be provided for noise level, advertisements or other information provided by cutomers
- Plug and play system
- 24 X 7 mode display in indoor environment.

39.0 Specification of Hardware and software for Central Receiving Station (if quoted by vendor).

39.1 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 (2 Numbers, 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) Model - Will be specified as the latest available at the time of delivery with manuals.
- 3) Processor- Intel Xeon Quad Core or higher with minimum, 2 MB L2 Cache memory, Front Side Bus - 800 Mhz
- 4) Rack Mountable- 4U / 6U- Rack Mountable Server with rack mounting kit
- 5) No. of processors- 2 numbers (Dual Processor)
- 6) Memory - 8 GB RAM / Scalable to 16 GB min, ECC DDR RAM memory (800 MHz minimum)
- 7) HDD- 2* 1 TB (hot plug) Ultra 160 SCSI disks. 10 K RPM
- 8) Networking- 2 x 10/100/1000 MBPS Ethernet controller 11)
- 9) DVD reader, DVD RW Drive
- 10) Power Supply- Redundant Hot Pluggable power supply, 2 x 600 W or more (N*1 redundancy).
- 11) 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.
- 12) Audited TPC-C throughput- Must have audited TPMC rating Certificate must be attached
- 13) Keyboard- Standard Keyboard (104 Keys) Mouse - PS/2 type Microsoft or equivalent scroll mouse
- 14) Monitor- 19" Flat Panel LCD Monitor.
- 15) **Router – Suitable router and firewall for security**

39.1.1 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 all Zonal Offices and State Pollution Control Board Authorities.

39.1.2 UPS - 1 No

APC or any standard manufactures make 10 KVA UPS with sealed maintenance free batteries for 2 hours Power back to Hot redundant servers, web servers and data processing computer.

39.1.3 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 7 or better at the time of delivery
Hard disk capacity	:	2 X 1 TB or more
RAM	:	8 GB or more
Processor	:	2 nd Generation Intel® core I7- 2600s processor (2.8 hz) or better

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.

	:	processor (4M cache, up to 3.0 GHz , TPM) or better
Display	:	17.0” /14.0”
Accessories	:	Mouse, Bag etc.

39.2 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 integrated with the existing Phase 1 central and remote stations without any modification of existing Phase 1 system.

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.

Multiple communication possibilities

- Public Switched Telephone Network (PSTN)
- Mobile phone system (GSM/GPRS)
- SMS for alarms and smart phone data request
- Communication via IP link (client or server)
- Direct communication via serial port (RS232)
- Optional-Alternative communications systems (Radio, Satellite, 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

Window for enquiry and configuration of each station

- Name, number and abbreviation of the station, Location, UTM coordinates
- Connection type and telephone, if any.
- Configuration of channels, parameter and calculations
- Photography which represents the actual station (“Associate image”)

Hand on Operations

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

- Allow the Setting of Date/Time of the station.
- Real time data request from each channel (in table and graphs).
- Downloading of data stored in the station
- Downloading the station’s configuration of PC
- Downloading of PC’s configuration to the stations
- Channel calibration settings
- Alarm trigger user settings for 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.
- 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 MS-Access or to text files (.txt), MS-EXCEL and XML.
- Creating monitoring environments with “gauges” displaying real time values.
- 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 (+,-,*,/,AND, OR, sqr, sin, cos, max, pow, etc.).

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.

39.3 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 CPCB Headquarter, 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 GPRS cellular network, data can be updated, for example, every 5 minutes or 10 minutes, or 15 minutes, as programmed by the CPCB 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) 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.
- 8) On selecting a station, the complete menu of the data should be displayed.
- 9) Data can be selected both in Tabular and graphical format
- 10) The graphical display for all noise parameters should be available
- 11) The graphical plot of noise data analysis like Peak Noise, average noise etc. are available for the user.
- 12) Noise mapping at all the station should be available with Calibration check status, Noise level alarm, saturation level indication.
- 13) The authorized users can download noise data in PDF and Excel format.
- 14) The software should have provision for displaying additional weather and environmental sensors like temp, humidity, air monitoring parameters etc. as available in future the central server for the respective station.

The new system must be compatible and seamlessly integrated with the existing Phase 1 Web server, central and remote stations without any modification of existing Phase 1 system.

40.0 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.

41.0 Calibrator:

41.1 Specification of hand held calibrator

Selectable ranges	:	30-100 or 60-130dB
Noise floor	:	<33dB(A)
Time weightings	:	Fast, Slow
Frequency weightings	:	A and C
Batteries	:	3x AA Alkaline or rechargeable
Battery life	:	Greater than 35 hours
External power	:	5V via USB 2.0 'Mini B' socket
Tripod mount	:	1/4" Whitworth socket
Compliance with	:	ANSI S1.43, IEC 60804
Carry Case & storage case	:	To be provided

41.2 Specifications for External Acoustic Calibrator

Sound pressure level:

Nominal: 114 dB re. 20 μ Pa

Individually calibrated under the following reference conditions:

Ambient pressure: 101.3 kPa

Ambient temperature: 20 °C

Ambient humidity: 65 % RH

Calibration accuracy:

Absolute: ± 0.09 dB at reference conditions

Accuracy when corrected for ambient pressure with: RA0168 ± 0.1

ZC0002K ± 0.15 dB dB

Frequency : 250 Hz ± 0.5 %

Distortion : < 1.5 %

Temperature range : - 10 °C to + 50 °C

Power : Battery operated

Carry and storage case to be provided

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

Annexure-I

S. No. APPLICATION FORM

(To be filled by the bidder)

- 1) Name and full address of the Bidder including Telegraphic Address/Telex No. and Fax No
- 2) Name and Designation of the Head of the Firm/supplier and his Telephone No.
- 3) (i) In case the supplier is located out of Delhi; specify the Address/Authorized Distributor's or Agent's Address in Delhi, if any.

(ii) Name, Designation, Address Telephone & Fax Numbers of the Authorised Person who may be contacted during the process of the purchase concerned under this document (Applicable for all the suppliers)
- 4) Whether Earnest Money Deposited (Amount: Rs).
- 5) If yes, DD /BG No, Date and Name of issuing Bank.
- 6) Validity of Tender
- 7) If the tender documents are accepted in full (Yes or No)
- 8) Income Tax Clearance Certificate attached (Latest) (Yes or No) with PAN Number.

Place:

Date:

Legally Binding Signature with stamp

Annexure - II

UNDERTAKING

Date _____
Tender Notice No. _____

**TO
THE CHAIRMAN
CENTRAL POLLUTION CONTROL BOARD
(MINISTRY OF ENVIRONMENT & FORESTS GOVERNMENT OF INDIA)
C.B.D. CUM OFFICE COMPLEX
EAST ARJUN NAGAR, DELHI - 110 032.**

Sir,

Having examined the conditions of Tender Document and specifications of the instruments, the receipt of which is hereby acknowledged. We, the undersigned, offer to supply, delivery and install the following

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.

(Please add additional pages, if required)The above supply, installation shall be in conformity with the specifications and conditions of supply.

We undertake if our bid is accepted to deliver the instruments quoted by us, we shall deliver and install within the period indicated by us in our offer.

We agree to abide by this bid for a period of 120 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before expiration of that period.

We are submitting a Demand Draft / Bank Guarantee for Rs.....in favour of "Central Pollution Control Board", Delhi towards the Earnest Money.

This Bid, together with your written acceptance thereof in your notification of award shall constitute a bidding contract between us.

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

Dated this... ..day of... ..2010

Signature of authorized Person, Name with Stamp & full Address

ANNEXURE- III

**<Letterhead of the Manufacturer>
FORM OF CERTIFICATE OF COUNTRY OF ORIGIN**

**To,
Central Pollution Control Board,
Parivesh Bhavan, East Arjun Nagar,
Delhi-110032**

Name of Manufacturer

Subject : Certificate of country of Origin

We, (Name of Manufacturer), hereby certify that our equipment for procurement and installation of equipment for CPCB, India is to be manufactured in the country mentioned below:

Item No.	Name of the Equipment	Country of Origin

Signature

Name of the Person

Title

Name of the Manufacturer

Legal Address

Countersign of competent authority of the country of origin

ANNEXURE-IV

<Letterhead of the Manufacturer>

FORM OF CERTIFICATE OF AFTER SALES SERVICE BY MANUFACTURER

Date:

To

Central Pollution Control Board,
Parivesh Bhavan, East Arjun Nagar,
Delhi-110032

Sub: Certificate of Supply of consumables and Spare Parts and Maintenance Service and Repair Work after sales by Manufacturer including Warranty support.

This is to certify that we (Name of the manufacturer) shall supply the consumables and spare parts of the equipment mentioned below during warranty period and to provide the on-site maintenance services and repair works for the equipment after sales(hereinafter referred to as “ After Sales Services”) through our duly certified agent (Name of authorized representative for after sales service) in India, existing under the law of India with its principal office of business at (Address). We hereby appoint (Name of authorized representative for after sales service) to cooperate with (Name of Bidder), in undertaking After Sales Service during comprehensive warranty period of three years and CAMC period for at least two (02) years after the warranty period of three years. It is hereby guaranteed that we shall maintain stocks of consumables and spare parts for the following equipment for the period of five (05) years including warranty CAMC period and supply the said consumables and spare parts and provide the on-site maintenance services and repair works through our authorized representative for after sales service in India.

Item No.	Name of the Equipment	Name of the Manufacturer	Name of authorized representative after sales service and Address

Signature:

Name of Person:

Position:

Name of Manufacturer:

Legal address of Manufacturer:

ANNEXURE-V

FORM OF EQUIPMENT DETAILS

Item No.	Name Of The Equipment	Propose Model	Manufacturer	Country Of Origin	Technical Catalogue Attached(Yes/No)

Signature of authorized person, name with stamp

Full Address:

Annexure-VI

PROFORMA FOR FINANCIAL CAPABILITY OF BIDDER

(for a period of last three years)

Bid no.....Date of opening.....

Name of the Bidder.....

YEAR	CURRENCY	TURNOVER
2009-2010 Financial Year		
2010-2011 Financial Year		
2011-2012 Financial Year		
Total		

Note:

The annual turnover amount is to be supported by annual report.

Signature of authorized person, name with stamp

Full Address:

ANNEXURE-VII

**PROFORMA FOR PERFORMANCE STATEMENT FOR BIDDER (for a
period of last three years)**

Bid no.....Date of opening.....

Name of the Bidder.....

Order placed by (full address of Purchaser)	Order No. & Date	Description of ordered equipment	Quantity Supplied	Value of Order	Date of Commissioning and handling over	Has the equipment been satisfactory functioning?

Note: Bidder to furnish above detail for each equipment of the quoted package on separate sheet.

Signature of authorized person, name with stamp

Full Address:

ANNEXURE-VIII

CAPABILITY & EXPERIENCE OF AFTER SALES SERVICES

Item no.	Name of the Equipment	List of Consumables available for offered equipment	List of spare parts available for offered equipments	Name of authorized representative in India for After Sales Services	Address, Tel., Fax nos., Email-id	No. of Engineers with their training details	Response time for After sales services including warranty support	Past experience of the After sales service

Note: List of applicable spares parts should be indicated for all the items in quoted package(s)

Signature of authorized person, name with stamp

Full Address:

ANNEXURE-IX

CHECKLIST (GENERAL)

Name of Bidder :

Name of Manufacturer:

S. No.	Activity	Compliance Yes/No/NA	Remarks
1.	Have you enclosed EMD of required amount for the quoted schedules?		
2.	Have you enclosed duly filled and signed tender Form		
3.	Have you enclosed clause by clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications?		
4.	In case of Technical deviations in the compliance statement, have you identified and marked the deviations?		
5.	Have you submitted the past supply details		
6.	(a) Are you original manufacturer of Equipment (b) Have you submitted manufacturer's authorization from OEM.		
7.	Have you submitted prices of goods, turnkey (if any), AMC etc. in the Price schedule as per proforma		
8.	Have you kept validity of tender for acceptance by the purchaser as per the TE document?		
9.	In case of Indian Tenderer, have you furnished Permanent Account No. as allotted by the Income Tax department of Government of India?		
10.	Have you intimated the name and full address of your Banker(s) along with your account number?		

11.	Have you fully accepted payment terms as per TE document		
12.	Have you accepted the warranty as per TE document?		
13.	Have you furnished documents establishing your eligibility & qualification criteria as per TE documents		
14.	Currency of Tender		

Signature of authorized person, name with stamp

Full Address:

ANNEXURE-X

<Letterhead of the Bidder>

Date:
Grant No.....
Bid No.....

BID FORM

To,
Central Pollution Control Board, India

1. Having examined the bidding documents for procurement, installation & commissioning of real time ambient noise monitoring system, we, the undersigned, offer to execute and complete the whole of the works and remedy any defects therein, in conformity with the said Bidding Documents for the sum of International trading currency.....(in figures.....) for the equipment including all other charges as mentioned in the document, supplied from Foreign Origin and Indian Rupees.....(INR.....) for the incidental costs incurred in India(if any) as may be ascertained in accordance with the summary of Bid Price and Bid Price breakup attached herewith and made part of this bid.
2. We undertake, if our Bid is accepted, to complete and deliver the whole of the works comprised in the contract within the time specified in the contract, subject to the said conditions.
3. If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to twenty (20) percent of the contract price for the due performance of the contract.
4. Unless and until a formal contract is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest of any bid you may receive, and that you will not defray any expenses incurred by us in bidding.

Date :

Signature.....

Duly authorized to sign Bid for and on behalf of.....

(In Block Capital).....

Address.....

Facsimile number.....

Telephone number.....

Email Id.....

ANNEXURE-XI

Bid Price Breakup for Equipment (CIF) Price

Details showing quantity, specification and other details of the instruments offered (to be filled by the bidder and must be kept in "Price Bid" part of the Tender)

Sl. No. and Number of Instruments as per Annexure XII	Name of Instrument	Model offered by the Bidder	Quantity	Unit Price (in foreign currency/ Indian Currency	Freight and concessional custom duty if applicable	Total Amount	VAT /Service tax as applicable
1	2	3	4	5	6	7	8

Signature of authorized person, name with stamp

Full Address:

Annexure XII

S. No.	LIST OF DELIVERABLE ITEMS	QTY
1	Noise Monitoring Terminal (NMT)	
1.1	IEC 61672-1(2002-05) Class1 : Outdoor Microphone	35
1.2	NMT system with alphanumeric display	35
1.3	High gain GSM /GPRS Antenna (8 DB dual band antenna)	35
1.4	IP-65 compliant Enclosure for Remote Stations	35
1.5	Transmission unit- GSM/GPRS Modem	35
1.6	Intrusion alarm to be transmitted at Central Station	35
2	Power backup	
2.1	External battery (minimum 65AH) sealed maintenance free	35
2.2	Solar Panel for Power Back up (minimum 75 watts)	35
2.3	Solar charge controller (minimum 20 Amp)	35
2.4	External NEMA 4 Enclosure	35
3	Recurring Charges	
3.1	Remote station recurring charges on yearly basis including SIM cost, 35 recurring cost and any other cost.	Lumsum per year
3.2	Recurring Charges on yearly basis for Central Server with 4Mbps fixed IP Connection	Lumsum per year
3.3	Remote display, GPRS receiving charges on yearly basis (35 Nos.)	Lumsum per year
4	Central Receiving station (Required if bidder is unable to integrate the proposed network in the existing Central Receiving Station)	
4.1	Dual Redundant, Hot Standby Servers with OS	1 Set
4.2	Web Enabled Server	1 Set
4.3	Router and firewall	1 Set
4.4	APC or any standard manufactures make 10 KW online UPS with sealed maintenance free batteries for 4 hours (Power back to Hot redundant servers, web servers and data processing 42" display)	1 Set
4.5	Analysis Software with full graphics display, communication management and database generation for Central Receiving Station	1
4.6	Web Enabled Software for data distribution	1
4.7	42 inch plasma screen for data display	1
5	Installation and Civil Work	
5.1	4 meters triangular lattice mast and mounting accessories	35 Sets
5.2	Installation of the remote stations with Civil work	35

6.	Automatic backup	
6.1	4 TB NAS Drive for incremental backup of existing and new system.	1
7.	Calibrators	
7.1	Hand held stand noise system with transportation kit	1
7.2	External acoustic calibrator with microphone adaptor	1
8	LCD Display	
8.1	LCD remote display System	35
9	Laptops	2
10	Transportation and insurance	
10.1	Transportation and insurance of material to CPCB headquarter.	1
10.2	Transportation and insurance of material from CPCB headquarter to respective sites	1
11	Two Year Extended Warranty	Lumpsum
12	CAMC	
12.1	Comprehensive Annual Maintenance Cost for 4 th year	Per year
12.2	Comprehensive Annual Maintenance Cost for 5 th year	Per year

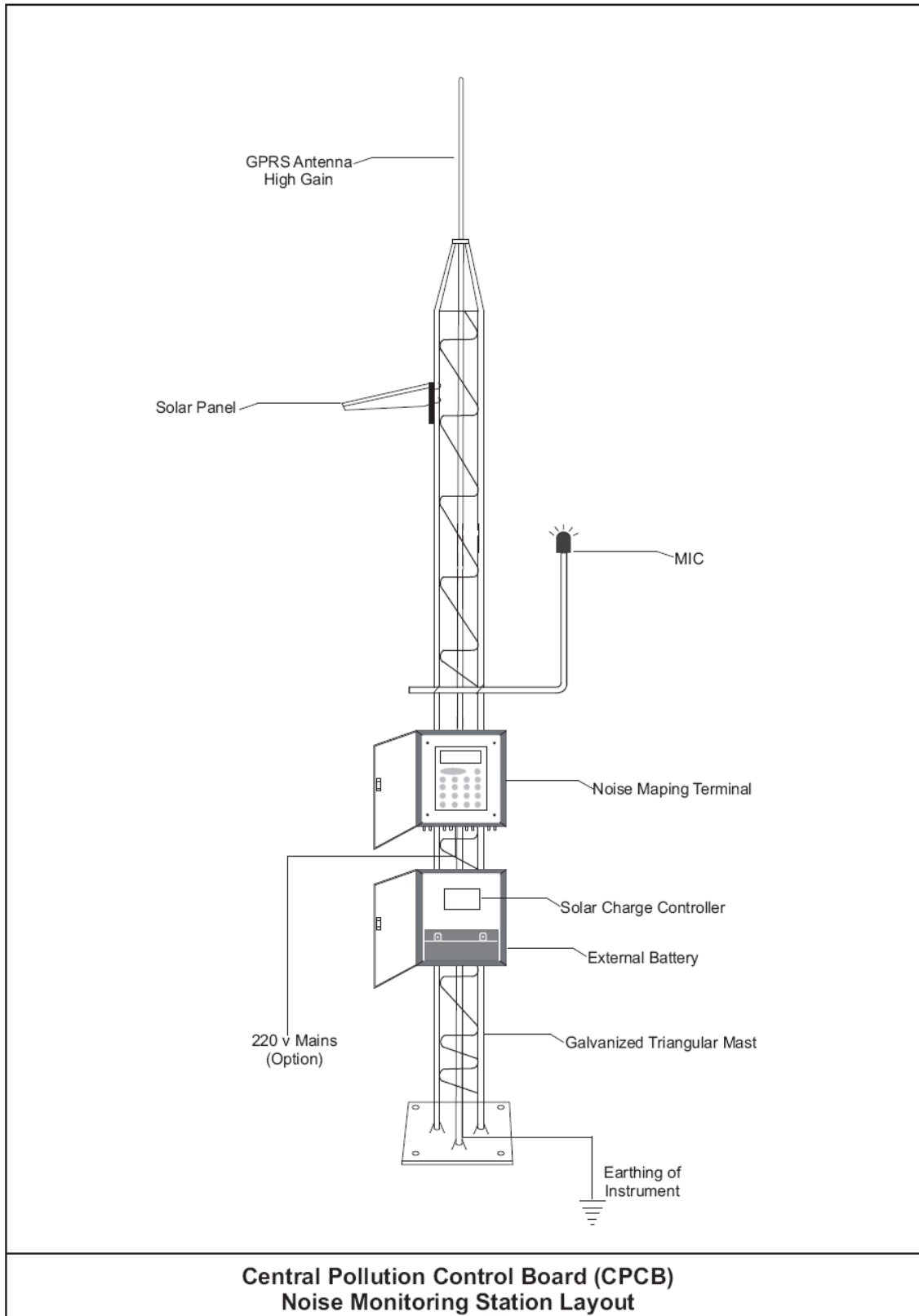
	Optional Items (Not to be added in price comparison)	
1	Residential Manager cost per month	1

Annexure XIII

Number of Cities and Monitoring Stations

S. No.	Cities	Monitoring Stations
1	Mumbai	5
2	Delhi	5
3	Chennai	5
4	Bangalore	5
5	Hyderabad	5
6	Lucknow	5
7	Kolkata	5

Annexure XIV



REPORT FORMAT

1. MONTHLY DATA REPORT (CITYWISE)

S. No.	Station No.	Stations Name with zone		Limit in dB(A) Leq		Day Leq. dB(A)	Day Max dB(A)	Day Mini dB(A)	Night Leq. dB(A)	Night Max dB(A)	Night Mini dB(A)
		City	Location	Day 06 AM to 10 PM	Night 10 PM to 06 AM						
1	1682	Bangalore	Bangalore, Parisar Bhawan (C)	65	55						
2	1685		Bangalore, Peeniya (I)	75	70						
3	1693		Bangalore, Nisarga Bhawan (R)	55	45						
4	1711		Bangalore, Marathali (C)	65	55						
5	1713		Bangalore, BTM (R)	55	45						
6	1684	Chennai	Chennai, Eye Hospital (S)	50	40						
7	1692		Chennai, T. Nagar (C)	65	55						
8	1706		Chennai, Perambur (C)	65	55						
9	1710		Chennai, Guindy (I)	75	70						
10	1717		Chennai, Triplicane (R)	55	45						
11	1670	Delhi	Delhi, Dilshad Garden (S)	50	40						
12	1671		Delhi, CPCB (C)	65	55						
13	1672		Delhi, DCE (S)	50	40						
14	1683		Delhi, ITO (C)	65	55						
15	1688		Delhi, NSIT (S)	50	40						
16	1673	Hyderabad	Hyderabad, Abits (C)	65	55						
17	1687		Hyderabad, Punjagutta (C)	65	55						
18	1689		Hyderabad, Jeedimetla (I)	75	70						
19	1690		Hyderabad, Zoo (S)	50	40						
20	1691		Hyderabad, Jublee Hills (R)	55	45						
21	1705	Kolkatta	Kolkatta, SSKM Hospital (S)	50	40						
22	1707		Kolkatta, Gole Park (I)	75	70						

S. No.	Station No.	Stations Name with zone		Limit in dB(A) Leq		Day Leq. dB(A)	Day Max dB(A)	Day Mini dB(A)	Night Leq. dB(A)	Night Max dB(A)	Night Mini dB(A)
		City	Location	Day 06 AM to 10 PM	Night 10 PM to 06 AM						
23	1708		Kolkatta, Head Quarter (C)	65	55						
24	1719		Kolkatta, Patauli (R)	55	45						
25	1720		Kolkatta, New Market (C)	65	55						
26	1686	Lucknow	Lucknow, Talkatora (I)	75	70						
27	1704		Lucknow, Hagraj Ganj (C)	65	55						
28	1709		Lucknow, P.G.I. (S)	50	40						
29	1714		Lucknow, Indira Nagar (R)	55	45						
30	1716		Lucknow, Gomti Nagar (S)	55	45						
31	1702	Mumbai	Thane, Mumbai (C)	65	55						
32	1703		Vashi Hospital, Navi Mumbai (S)	50	40						
33	1712		Mumbai, Ashp (S)	50	40						
34	1715		Mumbai, Bandra (C)	65	55						
35	1718		Mumbai, MPCB, Head Quarter (C)	65	55						

I = Industrial, C = Commercial, R = Residential, S = Silence Zone

2. Daily inspection report

S. No.	Stations Name	Leq. dB(A) 24 hourly	Min. Value dB(A)	Max. Value dB(A)	Avg. Battery Level 24 hrs. (Volts)	Gap/Remarks, if any
1	Delhi, Dilshad Garden (S)					
2	Delhi, CPCB (C)					
3	Delhi, DCE (S)					
4	Hyderabad, Abits (C)					
5	Bangalore, Parisar Bhawan (C)					

S. No.	Stations Name	Leq. dB(A) 24 hourly	Min. Value dB(A)	Max. Value dB(A)	Avg. Battery Level 24 hrs. (Volts)	Gap/Remarks, if any
6	Delhi, ITO (C)					
7	Chennai, Eye Hospital (S)					
8	Bangalore, Peeniya (I)					
9	Lucknow, Talkatora (I)					
10	Hyderabad, Punjagutta (C)					
11	Delhi, NSIT (S)					
12	Hyderabad, Jeedimetla (I)					
13	Hyderabad, Zoo (S)					
14	Hyderabad, Jublee Hills (R)					
15	Chennai, T. Nagar (C)					
16	Bangalore, Nisarga Bhawan (R)					
17	Mumbai, Thane (C)					
18	Navi Mumbai, Vashi Hospital(S)					
19	Lucknow, Hagraj Ganj (C)					
20	Kolkatta, SSKM Hospital (S)					
21	Chennai, Perambur (C)					
22	Kolkatta, Gole Park (I)					
23	Kolkatta, Head Quarter (C)					
24	Lucknow, P.G.I. (S)					
25	Chennai, Guindy (I)					
26	Bangalore, Marathali (C)					
27	Mumbai, Ashp (S)					
28	Bangalore, BTM (R)					
29	Lucknow, Indira Nagar (R)					
30	Mumbai, Bandra (C)					
31	Lucknow, Gomti Nagar (S)					
32	Chennai, Triplicane (R)					
33	Mumbai, MPCB, Head Quarter (C)					

S. No.	Stations Name	Leq. dB(A) 24 hourly	Min. Value dB(A)	Max. Value dB(A)	Avg. Battery Level 24 hrs. (Volts)	Gap/Remarks, if any
34	Kolkatta, Patauli (R)					
35	Kolkatta, New Market (C)					

3. Yearly report

S. No.	Station No.	Stations Name with zone		Limit in dB(A) Leq		Day Leq. dB(A)	Day Max dB(A)	Day Mini dB(A)	Night Leq. dB(A)	Night Max dB(A)	Night Mini dB(A)
		City	Location	Day 06 AM to 10 PM	Night 10 PM to 06 AM						
1	1682	Bangalore	Bangalore, Parisar Bhawan (C)	65	55						
2	1685		Bangalore, Peeniya (I)	75	70						
3	1693		Bangalore, Nisarga Bhawan (R)	55	45						
4	1711		Bangalore, Marathali (C)	65	55						
5	1713		Bangalore, BTM (R)	55	45						
6	1684	Chennai	Chennai, Eye Hospital (S)	50	40						
7	1692		Chennai, T. Nagar (C)	65	55						
8	1706		Chennai, Perambur (C)	65	55						
9	1710		Chennai, Guindy (I)	75	70						
10	1717		Chennai, Triplicane (R)	55	45						
11	1670	Delhi	Delhi, Dilshad Garden (S)	50	40						
12	1671		Delhi, CPCB (C)	65	55						
13	1672		Delhi, DCE (S)	50	40						
14	1683		Delhi, ITO (C)	65	55						
15	1688		Delhi, NSIT (S)	50	40						
16	1673	Hyderabad	Hyderabad, Abits (C)	65	55						
17	1687		Hyderabad, Punjagutta (C)	65	55						
18	1689		Hyderabad, Jeedimetla (I)	75	70						

S. No.	Station No.	Stations Name with zone		Limit in dB(A) Leq		Day Leq. dB(A)	Day Max dB(A)	Day Mini dB(A)	Night Leq. dB(A)	Night Max dB(A)	Night Mini dB(A)
		City	Location	Day 06 AM to 10 PM	Night 10 PM to 06 AM						
19	1690		Hyderabad, Zoo (S)	50	40						
20	1691		Hyderabad, Jublee Hills(R)	55	45						
21	1705	Kolkatta	Kolkatta, SSKM Hospital (S)	50	40						
22	1707		Kolkatta, Gole Park (I)	75	70						
23	1708		Kolkatta, Head Quarter (C)	65	55						
24	1719		Kolkatta, Patauli (R)	55	45						
25	1720		Kolkatta, New Market (C)	65	55						
26	1686		Lucknow	Lucknow, Talkatora (I)	75	70					
27	1704	Lucknow, Hagraat Ganj (C)		65	55						
28	1709	Lucknow, P.G.I. (S)		50	40						
29	1714	Lucknow, Indira Nagar (R)		55	45						
30	1716	Lucknow, Gomti Nagar (S)		55	45						
31	1702	Mumbai	Thane, Mumbai (C)	65	55						
32	1703		Vashi Hospital, Navi Mumbai(S)	50	40						
33	1712		Mumbai, Ashp (S)	50	40						
34	1715		Mumbai, Bandra (C)	65	55						
35	1718		Mumbai, MPCB, Head Quarter (C)	65	55						

I = Industrial, C = Commercial, R = Residential, S = Silence Zone

4. Monthly report

Station Name	Limit in Leq dB (A)		January			December	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	50	40												
	65	55												

	65	55												
	65	55												
	50	40												

PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made onday of the month of2012, between, CPCB, An autonomous body acting through Shri, (Designation of the officer, Ministry/Department, Government of India) hereinafter called the “BUYER”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns of the First Part and M/s..... represented by Shri....., Chief Executive Officer (hereinafter called the “BIDDER / SELLER” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure (Name of the Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER CPCB work under the ageis of Environment & Forests, performing its functions as per the provisions of Water Act 1974, Air Act ,1981 and EPA Act, 1986.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Commitments of the BUYER

- 1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

- 1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.

- 1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an inquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

Commitments of BIDDERS

2. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
 - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
 - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.
 - 3.3* BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
 - 3.4* BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
 - 3.5* The BIDDER further confirms and declares to the BUYER that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity of the defence stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or

intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

- 3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the BIDDER or any employee of the BIDDER or any person action on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filling of tender.
- 3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER.

3. Previous Transgression

- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.
- 4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

4. Sanctions for Violations

- 5.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:-
- (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER (s) would continue.
 - (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
 - (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
 - (iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
 - (v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
 - (vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money (s) due to the BIDDER.
 - (vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the BUYER.
 - (viii) To recover all sums paid in violation of this Pact by BIDDER (s) to any middleman or agent or broker with a view to securing the contract.
 - (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
 - (x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

- 5.2 The BUYER will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 5.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor (s) appointed for the purposes of this Pact.

6. Fall Clause

- 6.1 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.

7. Independent Monitors

- 7.1 The BUYER has appointed Independent Monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission (Names and Addresses of the Monitors to be given).
- 7.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 7.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.
- 7.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 7.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor

shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.

7.7 The BUYER will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

7.8 The Monitor will submit a written report to the designated Authority of BUYER/Secretary in the Department/ within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

8. **Facilitation of Investigation**

In case of any allegation of violation of any provisions of this Pact or payment of Commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. **Law and Place of Jurisdiction**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the at of the BUYER.

10. **Other Legal Actions**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

11. **Validity**

11.1 The validity of this Integrity Pact shall be from date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both the BUYER and the BIDDER/Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

11.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12. The parties hereby sign the Integrity Pact aton.....

BUYER

BIDDER

Name of the Officer.

CHIEF EXECUTIVE
OFFICER/ AUTHORISED SIGNATORY

Designation

Deptt./MINISTRY/PSU

Witness

Witness

1.....

 1.....

2.....

 2.....

*Provisions of these clauses would need to be amended/ deleted in line with the policy of the BUYER in regard to involvement of Indian agents of foreign suppliers.