

CENTRAL POLLUTION CONTROL BOARD

DELHI

EXPRESSION OF INTEREST

CPCB invites Expression of Interest (EOI) from reputed Institutions/ Organization for **“Study on Source identification and mitigation actions for Noise Pollution Using Noise mapping and prediction techniques”** For details please visit <http://www.cpcb.nic.in/Tenders.php>. Last date for receipt of EOI is 30/10/2014 by 5.00P.M.

(A B Akolkar)
Member Secretary

**CENTRAL POLLUTION CONTROL BOARD
DELHI**

Notice inviting Expression of Interest (EOI) for “Study on Source identification and mitigation actions for Noise Pollution Using Noise mapping and prediction techniques”

1.0 Background

Noise pollution refers to sounds in the environment that are caused by humans and that threaten the health or welfare of human or animal inhabitants.

The most common source of noise pollution by far, the one that affects the most people on the planet, is motor vehicles. Aircraft and industrial machinery are also major sources. Additional noise pollution is contributed by office machines, sirens, power tools, and other equipment. The response of ear to sound is very dependent on the frequency content of the sound. The ear has a peak response around 2.5 – 3 kHz and has a relatively low response at low frequencies.

Noise health effects are both health and behavioral in nature. The unwanted sound is called noise. This unwanted sound can damage physiological and psychological health. Noise pollution can cause annoyance and aggression, hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances, and other harmful effects. Furthermore, stress and hypertension are the leading causes to health problems, whereas tinnitus can lead to forgetfulness, severe depression and at times panic attacks.

Central Pollution Control Board (CPCB) in association with State Pollution Control Boards has laid down National Ambient Noise Monitoring Network in 07 metropolitan cities and installed 35 no. of Noise Monitoring System in Mumbai, Delhi, Kolkata, Chennai, Bangalore, Lucknow and Hyderabad (five stations in each) under Phase-I of the programme. The Strengthening of Network has been carried out by adding 35 more stations in the same 07 metropolitan cities during 2014-15

In order to develop the management strategies or action plans for major cities and towns this kind of study has been a long desired felt. CPCB has developed a huge database of sound level data of 07 cities and to use this database for decision making CPCB felt to take up the study on “**Source identification and mitigation actions for Noise Pollution Using Noise mapping and prediction techniques**” for compliance of Noise Pollution (Regulation and Control) Rules, 2000.

2.0 OBJECTIVES AND SCOPE OF WORK

In order to address “**Study on Source identification and mitigation actions for Noise Pollution Using Noise mapping and prediction techniques**”, imperative pre-requisite and following steps under scope of services are proposed:

1. Identification and quantification of sources of noise pollution in 07 metropolitan cities i.e. Mumbai, Delhi, Kolkata, Chennai, Bangalore, Lucknow and Hyderabad.
2. Correlation of sound level data produce from 70 no. of Noise Monitoring System installed in above 07 cities.
3. Mitigation measures to be suggested for reducing noise pollution in identified locations.
4. Mapping and modeling software to be used for visualization of data on impact area.
5. Noise maps to be used for communicating the noise situation to stakeholders, inform areas of planning such as construction, traffic & transport and to build a common understanding within the community.
6. Software for mapping and prediction to be delivered with proper training to officials of CPCB for infrastructure development.
7. Report submission indicating Source identification, quantification and mitigation measures.

3.0 SCHEDULE FOR COMPLETION OF TASKS

A maximum of one year time is allotted for the submission of draft report and one month for submission of Final report after getting comments from CPCB on draft report.

4.0 SUPPORT OR INPUTS TO BE PROVIDED BY CPCB

Authorization letter will be issued in favour of institute/ organization for collection of data, in-depth study.

5.0 FINAL OUTPUTS WILL BE REQUIRED

Comprehensive report on each city shall be prepared separately and a consolidated summary of each zone will be compiled as a separate compendium.

The final report will be accepted by the Central Board after presentation at CPCB – HO, Delhi.

6.0 ELIGIBILITY CRITERIA

The Expert agencies including CSIR Labs/ Academic Institutes/ Laboratories recognized under EPA, 1986 and other reputed organizations should fulfill the following criteria:

- a) Knowledge/Experience in the same field
- b) Adequate manpower having expertise in the same field/ 5 years or more experience in the field

Forms for description of approach, methodology and workplan for performing the assignment, Team Composition and Task Assignment and Curriculum Vitae (CV) for proposed professional staff is attached at Annexure-I. Standards forms for financial evaluation is attached at Annexure-II.

7.0 ROLE OF CPCB

- All relevant data available with CPCB shall be shared with the Consultant. To collect the data from other sources, letters to concerned authorities will be given by CPCB.
- CPCB will extend logistical support to consultant for conducting workshops.

7.1 PROJECT MONITORING BY CPCB

A review Committee will monitor the project progress and outputs. A Review Committee will be formed by CPCB. The committee shall consist of representatives from concerned fields.

8.0 SUBMISSION OF EOI

Interested agencies including Reputed Institute/ CSIR Labs/ Academic Institutes and other reputed organizations may submit EOI in a sealed envelope by speed-post clearly superscribed EOI for “**Study on Source identification and mitigation actions for Noise Pollution Using Noise mapping and prediction techniques**” to the Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032 by 30/10/2014 by 5.00P.M in hard copy and a CD containing the following information:

- a) type of organization
- b) areas of strength/ specialization relevant to the scope of work and objectives
- c) previous relevant experience
- d) details of key staff to be entrusted for the assignment, together with their curriculum vitae
- e) undertaking of the scope of work, objective, short approach and comments

9.0 Late submission or submissions that do not conform to the above requirements will not be considered

10.0 Based on the response received, suitable institute/ organization will be short-listed and the TOR document will be sent for submission of Technical and Financial Proposal.

**FORM TECH-1 DESCRIPTION OF APPROACH, METHODOLOGY AND WORK
PLAN FOR PERFORMING THE ASSIGNMENT**

(For small or very simple assignments the Client should omit the following text in Italic)

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (50 pages, inclusive of charts and diagrams) divided into the following three chapters:

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

a) Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule at TECH-5

c) Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

FORM TECH-2 TEAM COMPOSITION AND TASK ASSIGNMENTS

<i>1. Professional Staff</i>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

2. Support Staff

Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

FORM TECH-3 CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. Proposed Position *[only one candidate shall be nominated for each position]:* _____

2. Name of Firm *[Insert name of firm proposing the staff]:* _____

3. Name of Staff *[Insert full name]:* _____

4. Date of Birth: _____ **Nationality:** _____

5. Education *[Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment]:* _____

6. Membership of Professional Associations: _____

7. Other Training *[Indicate significant training since degrees under 5 - Education were obtained]:* _____

8. Countries of Work Experience: *[List countries where staff has worked in the last ten years]:* _____

9. Languages *[For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]:* _____

10. Employment Record *[Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.]:*

From *[Year]*: _____ To *[Year]*: _____

Employer: _____

Positions held: _____

<p>11. Detailed Tasks Assigned</p> <p><i>[List all tasks to be performed under this assignment]</i></p>	<p>12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned</p> <p><i>[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]</i></p> <p>Name of assignment or project: _____</p> <p>Year: _____</p> <p>Location: _____</p> <p>Client: _____</p> <p>Main project features: _____</p> <p>Positions held: _____</p> <p>Activities performed: _____</p>
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13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

_____ Date: _____

[Signature of staff member or authorized representative of the staff]

Day/Month/Year

Full name of authorized representative: _____

FORM TECH-4 STAFFING SCHEDULE¹

N°	Name of Staff	Staff input (in the form of a bar chart) ²													Total staff-month input				
		1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Field ³	Total		
Foreign																			
1		[Home]																	
		[Field]																	
2																			
3																			
n																			
Subtotal																			
Local																			
1		[Home]																	
		[Field]																	

N°	Name of Staff	Staff input (in the form of a bar chart) ²													Total staff-month input			
		1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Field ³	Total	
2																		
n																		
											Subtotal							
											Total							

- 1 For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- 2 Months are counted from the start of the assignment. For each staff indicate separately staff input for home and field work.
- 3 Field work means work carried out at a place other than the Consultant's home office.

 Full time input

 Part time input

N°	Activity ¹	Months ²												
		1	2	3	4	5	6	7	8	9	10	11	12	n
N														

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in the form of a bar chart.

Financial Proposal - Standard Forms

[Comments in brackets [] provide guidance to the shortlisted Consultants for the preparation of their Financial Proposals; they should not appear on the Financial Proposals to be submitted.]

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal. Such Forms are to be used whichever is the selection method.

FIN-1 Financial Proposal Submission Form

FIN-2 Summary of Costs

FIN-3 Break-up of Costs by Activity

FIN-4 Reimbursable expenses

FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures]. The consultants, sub-consultants and the Personnel shall pay the taxes, taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this contract and the client shall perform such duties in this regard to the deduction of such taxes (*tax deduction at source – TDS*) as may be lawfully imposed

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Paragraph Reference 1.12 of the Data Sheet.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act, 1988".

Commissions and gratuities paid or to be paid by us to agents relating to this Proposal and Contract execution, if we are awarded the Contract, are listed below:

Name and Address of Agents	Amount and Currency	Purpose of Commission or Gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [*In full and initials*]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

FORM FIN-2 SUMMARY OF COSTS

Item	Costs
	[Indicate Local Currency]
1. Total Costs of Financial Proposal	
2. Local Indirect Taxes and Duties payable in India, as mentioned in form I	
Consultancy service tax payable in India	
<i>Total Amount of financial Proposal including taxes</i>	

FORM FIN-3 BREAK-UP OF COSTS BY ACTIVITY

Group of Activities (Phase):	Description:
_____	_____
_____	_____
Cost component	Costs
	<i>[Indicate Local Currency]</i>
Remuneration	
Reimbursable Expenses	
Subtotals	
2. Local Indirect Taxes and Duties payable in India	
Consultancy Service Tax payable in India	
TOTAL	

FORM FIN-4 BREAK-UP OF REIMBURSABLE EXPENSES REMUNERATION

This Form FIN-4 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Consultant for possible additional services requested by the Client)

N°	Description	Unit	Unit Cost
	Per diem allowances	Day	
	International flights	Trip	
	Miscellaneous travel expenses	Trip	
	Communication costs between [<i>Insert place</i>] and [<i>Insert place</i>]		
	Drafting, reproduction of reports		
	Equipment, instruments, materials, supplies, etc.		
	Shipment of personal effects	Trip	
	Use of computers, software		
	Subcontracts		
	Local transportation costs		
	Office rent, clerical assistance		
	Training of the Client's personnel		