



GOA STATE POLLUTION CONTROL BOARD
Near Pilerne Industrial Estate, Opp. Saligao Seminary,
Saligao, Bardez- Goa.

Tel: 91(0)832-2407700, 2407701, 2407703

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TENDER DOCUMENT

Development of Digital Portal and Dashboard for Noise Monitoring

No. GSPCB/ITD/ITF/2024/201011/IT/25546

Dated: 26/02/2024

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**TENDER NOTICE**

No. GSPCB/ITD/ITF/2024/201011/IT/

Dated:16 /02/2024

The Goa State Pollution Control Board invites Tenders from well- established firms/agencies and desirably having relevant experience in the line of work for creation and Development of **Digital Portal and Dashboard for Noise Monitoring. Dashboard solution shall be deployed on empanelled cloud server of Ministry of Electronics and Information Technology (MEITY) which shall be managed by bidder.**

EMD In Rupees(INR)	Tender Processing fee (non-refundable) in Rupees (INR)
10,000/-	6000.00

TENDER SCHEDULE

1. The last date of submission of tender is **15/03/2024 up to 15.00 Hrs.**
2. The date & time of opening of tender is **19/03/2024 at 16:00 Hrs.**(Technical bid) and opening of Financial bid date will be informed after completion of Technical Comparative Statements in the office of the GOA STATE POLLUTION CONTROL BOARD, Near Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao, Bardez-Goa. .

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Important Dates & Events

Tender Inviting Authority & communication address	Goa State Pollution Control Board Address: Near Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao, Bardez-Goa
Estimated duration of project:	4 months from the date of signing the work contract
Name of the Project Work	Development of Digital Portal and Dashboard for Noise Monitoring No. GSPCB/ITD/ITF/2015/201011/IT/
Earnest Money Deposit	INR 10,000/-
Tender processing fees	INR 6000/-
The last date of submission of tender	15/03/2024 up to 3.00 P.M.
Date of Opening of Technical bids	19/03/2024 at 4:00 PM
Date of Opening of commercial	Will be intimated later

1. INTRODUCCION

1.1) GENERAL INTRODUCTION

The Goa State Pollution Control Board (GSPCB) is an autonomous statutory organization constituted on 1st July, 1988 under the Water (*Prevention & Control of Pollution*) Act, 1974. Prior to that, when Goa formed part of the erstwhile Union Territory of Goa, Daman and Diu, the Central Board for the Prevention and Control of Water Pollution was performing the functions of the State Board in Goa. The Central Pollution Control Board (CPCB) at Ponda-Goa had established a Section Office for the purpose. The same arrangement continued till the constitution of the State Board. In the meanwhile, the Section Office was re-constituted as West Zonal Office and shifted to Baroda on 4th April, 1988. All the relevant records pertaining to Goa were transferred to the Goa State Pollution Control Board on 12th September, 1988.

The GSPCB, after its constitution, established its office in the Goa Medical College (GMC) Complex at Bambolim. In June 1991, the Government of Goa allotted independent premises for the Board at Patto- Panaji, where the Board shifted its office at House no. 243, Patto, Panaji in September 1991.

On 15th August, 2002 the Board acquired a new premises on the 1st floor in Dempo Tower at Patto Plaza, Panaji and shifted its full set-up to this new premise. The office as well as the laboratory was operating from here. Subsequently, on 15th August, 2005, additional premises measuring 311.86 Sq. mt. was acquired on the 4th floor of the same building which was dedicated to the Board Laboratory.

The Board has shifted its Administrative, Accounts, Legal, Information and Technology, Scientific and Technical section to the new Board premises located at Saligao, Bardez – Goa on 8th August, 2018, the laboratory along with analysts was shifted at the new premises in July 2019.

1.2) THE BOARD OFFICE

The GSPCB is presently operating from its own independent at Saligao. The Offices of the Chairman, Member Secretary, Technical section, Legal section, Accounts section, Scientific section, Information and Technology section & Administrative Section are currently operating from the new premises at Saligao, Bardez - Goa. The Board laboratory and entire Board office is assessed under ISO: 9001, ISO: 14001 and OHSAS: 18001. Additionally, the Board laboratory has obtained accreditations under the Ministry of Environment, Forest and Climate Change (*MoEF & CC*), and National Accreditation Board for Testing & Calibration Laboratories (*NABL*). The renewal of the same is under process.

Presently, there are one hundred twenty seven staff employed in the Board under the various sections.

2. BACKGROUND ABOUT GSPCB

2.1) SCIENTIFIC SECTION

The Board has a full fledged laboratory, operating on the 1st and 2nd floors of the Office Building at Saligao. The laboratory is well equipped with instruments and equipments needed for carrying out analysis of water, air and soil, industrial effluents,

rivers, wells, etc., for chemical, physical and bacteriological parameters including trace and toxic metals, pesticides and organic components. The Board laboratory follows the procedures / stipulated, protocol and guidelines in accordance with the MoEF and NABL accreditations. The laboratory has conducted periodical Internal Audits and External Audits of the Board Laboratory processes through NABL approved Auditors. Assessment of the Board laboratory is also conducted every two years under ISO: 17025 and every five years under the MoEF & CC requirement.

The Board has set up 19 Ambient Air Quality (AAQ) and 64 water quality monitoring stations under the Central Pollution Control Board sponsored projects National Air Monitoring Programme (NAMP) and National Water Monitoring Programme (NWMP). Of the 19 AAQ stations, operation of 14 locations are outsourced to MoEF&CC approved laboratories and 5 locations are operated by the GSPCB. The Ambient Air Quality is measured in terms of parameters such as PM₁₀, PM_{2.5}, SO₂, NO_x, CO, O₃ and Pb along with meteorological parameters. The Board has two mobile CAAQMS, which are being used for Continuous Ambient Air Quality Monitoring. Also in addition to NAMP conducted at 19 locations, AAQM has been conducted along transportation routes of e-auctioned ores to address complaints regarding dust pollution. Number of stack emission monitoring have also been conducted during the year.

The 79 NWMP stations are all monitored by GSPCB staff. These stations are monitored at defined intervals and the samples collected are analyzed at the Board laboratory for physical, chemical, metals, pesticides and microbiological parameters. During the year under report the Board laboratory collected **895** water samples from various sources such as ETP, STP, mine discharge (settling pond, mining pit, etc.), river water, well water, canal water, etc. and analyzed the same for various parameters i.e pH, Turbidity, Dissolved Solids, Conductivity, Dissolved Oxygen, Nitrate Nitrogen as NO₃-N, Nitrite Nitrogen as NO₂-N, Nitrate as NO₃, Nitrite as NO₂, Chloride as Cl, Sulphate as SO₄²⁻, Hardness as CaCO₃, Calcium as Ca, Magnesium as Mg, Suspended Solids, Oil & Grease, Chemical Oxygen Demand, Biochemical Oxygen Demand, Phosphate, Ammonical nitrogen, Acidity, Alkalinity, Fluoride, Boron (B), Chromium (Cr) Hexavalent, Potassium (K), Sodium (Na), Total Organic Carbon (TOC), Phenolphthalein Alkalinity, Total Fixed Solids, **Cadmium as Cd, Copper as Cu, Nickel as Ni, Chromium as Cr, Zinc as Zn, Cobalt as Co, Lead as Pb, Iron as Fe, Manganese as Mn, Arsenic as As, Total Coliform, Fecal Coliform, E. Coli, Total plate count, Organo Chlorine Pesticides (OCPS)** (Aldrin, Dieldrin, Heptachlor, Hexachlorobenzene, Methoxychlor, o,p' DDT, p,p' DDT, p,p'-DDE, α-BHC, β-BHC, γ-BHC), **Organo Phosphorous Pesticides (OPPs)** (Chlorpyrifos, Profenophos, Malathion, Parathion-methyl).

2.2) TECHNICAL SECTION

The Technical Section handles the Consent management. The industries, hazardous waste handling facilities, health care facilities, municipal solid waste facilities, etc. are inspected and monitored on regular basis. The inspection reports and analysis reports are put up online through Online Consent Management and Monitoring System (OCMMS) software which are scrutinized by the Technical Advisory Committee (TAC) for Red and Orange category of industries and subsequently approved by the Chairman (*in case of Red-category of industries*) upon which consents under the relevant acts and authorization under relevant rules are issued. During the year under report,

1,216 consents have been granted for operation and establishment of the above facilities under the Water and Air Acts, Hazardous Waste Rules, **288** Authorizations/Registrations are granted under Bio-Medical Rules, Solid Waste Rules, E-waste Management Rules, Plastic Waste management Rules and Battery Rules .

Besides, periodic inspections to monitor red category industries are also conducted to check the consent compliance by the units. Samples of waste water, ambient air and stack emissions are monitored and analyzed in the Board laboratory.

Additionally, inspections in response to public complaints are also conducted as and when required after initially scrutinizing the complaints through the 'Complaint Committee'. The complaints are monitored by inspection, samples are collected and analysed where required and action deemed fit is initiated if required.

2.3) LEGAL SECTION

The Legal section handles all the Legal / Court matters related to the functions of the Board. The matters are filed before the Hon'ble Supreme Court, the Hon'ble High Court, the National Green Tribunal (NGT), the Administrative Tribunal the Appellate Authority under the Air Act and the Water Act and other Lower Courts.

The Personal hearings for Industries, Public Hearing (*in case of industrial sectors mandating Environmental Clearance – EC*) and matters related to Right To Information (RTI) Act are also looked after by this Section.

Complaints are scrutinized and examined by the Legal section before initiating action in the matter. Notices/directions/clarifications are issued to the defaulting units under the Environment (Protection) Act, 1986 i.e. Municipal Solid Waste Rules, Hazardous Wastes Rules, Bio-Medical Rules, E-Waste management Rules, Noise Pollution Rules etc. whenever required to seek compliance for the defaulting.

2.4) ADMINISTRATIVE SECTION

The Administrative Section deals with all the Administrative matters of the Board, Preparation of Agenda and minutes for the Board meetings and subsequent follow up for the implementation of the decisions taken herein for smooth functioning of the Board.

2.5) ACCOUNTS SECTION

The Accounts section of the Board deals with all the Accounting and Financial matters of the Board such as monitoring of Revenue and Expenditures, preparation of Annual Budget and to advise the Board on financial matters in accordance with the Government Rules and Procedures for smooth functioning.

2.6) INFORMATION AND TECHNOLOGY

The Information and Technology section provides service to Industry in Online Registration for obtaining various Consents and Authorizations through Online Portal. The entire Board e-governance activities, support for Hardware and Software Infrastructure and troubleshooting are managed and executed successfully by IT Department. The implementation of Office Automation System by SAP Enterprise Resource Planning for the paperless office is achieved by the Board.

3. PROJECT OVERVIEW

Development of Digital Portal and Dashboard for Noise Monitoring

The Goa State Pollution Control Board invites Tenders from well- established firms/agencies and desirably having relevant experience in the line of work for creation and Development of **Digital Portal and Dashboard for Noise Monitoring. Dashboard solution shall be deployed on empanelled cloud server of Ministry of Electronics and Information Technology (MEITY) which shall be managed by bidder.**

4. ELIGIBILITY CRITERIA

The application should accompany the following documents:

- a. Attested copy of valid Registration Certificate.
- b. Attested copy of PAN Card
- c. Attested copy of Goods & Service Tax Identification Number (GSTIN) issued by Sales Tax Department.

4.1) Technical Criteria

- a. The attested copies of original work/Supply orders and certificates issued should be submitted along with the bid.

NOTE : All the documents should be attested by Government Gazetted Officer or duly notarized.

MODE OF SUBMISSION OF E.M.D. WITH THE TENDER DOCUMENTS:

- A. The bidders can deposit the full EMD of Rs. 10,000.00 as per the tender amount and processing fee on or before the closing date and time of submission of tenders through DD in favour of "Member Secretary Goa State Pollution Control Board" **and submit with the technical bid.**

5. SCOPE OF WORK

- 5.1) A web-based portal to receive various data sets as per details below:

Sr. No.	Description of Work
1.	Development of Digital Portal and Dashboard for Noise Monitoring
2.	Hosting and monitoring of web application at cloud server
3.	Maintenance Contract for the Period of 3 years

- 5.2) All noise monitoring device has to be registered with the Goa State Pollution Control Board and mandated to fit a GPS system with certain protocol criteria.
- 5.3) Once fitted, the removal or disconnection of the main power/internet failure to the GPS will be alerted to the system and considered as a violation unless it is with the approval of the Board. Punitive measures will be decided by the Board.

- 5.4) Data shall be received in the given parameter specification format. The platform should be robust and be able to handle more than 1000 users per second.
- 5.5) An Android based mobile app and a web-based application (interface) which is compatible to receive data from any type of noise monitoring device will be provided to the Board for live monitoring as well as history tracking of the noise violation. So also reports will be available for download.
- 5.6) The above applications will be made available to selected users based on their role.
- 5.7) An app and web based application shall be hosted by the agency only at the MEITY empanelled cloud server without any downtime
- 5.8) All data generated needs to be collated into different formats for reporting as per the Board requirement.
- 5.9) Any violations for exceedance of noise level can be automatically sent as SMS or email to monitoring personnel. Online system shall be connected to Board/SDM/Police.
- 5.10) Applications to be provided with Dashboard for easy representation in Map display, Graphical presentation and viewing of summary in statistical form on large display screens.
- 5.11) All application, android apps, noise monitoring device and GPS system must be operational.
- 5.12) In case of Data transmission halt due to network or other issues same has to be communicated via SMS or Email to Board office.
- 5.13) The duration of this Contract shall be for a
 - a) Phase 1: Dashboard creation
 - b) Phase 2: three year with effect from the date of dashboard handover to the Board which may be extended for further period depending upon the performance of the Agency and other related factors and at the full discretion of Competent Authority of the Board.
- 5.14) The selected bidder shall provide all assistance in up-gradation of software / Operating system as and when required during the period of service.
- 5.15) Calibration record of unit to be displayed.
- 5.16) AMC term will start from a day on successful completion of dashboard for a period of 3 years.

- 5.17) During support, bidder will be responsible for the following:
- Overall maintenance and working of the Dashboard system including all version upgrades, patches/fixes for Dashboard system
 - The selected bidder will be the single point of contact and responsible for AMC, warranties for software and services.
 - The Bidder should fix the bugs and carry out the necessary rectifications wherever necessary and deliver patches/ version changes effected (including installation of new upgrades.).
 - The operational support staff should have onsite support experience.
 - To provide help desk support both technical and functional during the contract period. The Bidder must also provide incident management solution to log issues, incidents with facility to generate reports for review and monitoring.

➤ **Parameter Specification:**

Sr.no	DATE	TIME	SOUND PARAMETER			
			Leq (A) dB(D) Avg of 16 hrs	Leq dB(A) (N) Avg. of 8 Hours	<u>LMax,</u> <u>LMin</u>	<u>L10, L50, L90</u>
Name of facility						

6. EVALUATION PROCESS

- Bidder will be called for presentation within 15 days after opening of the technical bid.
- Evaluation will be performed based on the below point's criteria technique.

Sl No.	Topics	Marks
1.	Specific experience of the agency related to the scope of work	40
2.	Experience in similar kind project of PSU's/Govt. / reputed private or Limited Companies projects relevant to the engagement	20
3.	05 years of experience in GPS working System	20
4.	Adequacy of the proposed work plan and methodology for monitoring the noise meter in response to the scope of work including presentation on methodology proposed	40
5.	Availability of Infrastructure and specialise expert/key staff for developing the application	20
Total		100
The minimum technical's core required to pass is		100 Points

- 6.3) The number of points to be given under each of the evaluation criteria, mentioned above will solely depend on the GOA STATE POLLUTION CONTROL BOARD based on the documents submitted by bidder, which shall be final and has to be accepted by the tenderer without any representation or dispute, etc. at any stage or even after the finalization of the contract.
- 6.4) The job shall be awarded to the successful Tenderer, after compliance to all terms and conditions as stipulated in the tender document and whose bid has been evaluated as lowest after evaluation.

7. BID SUBMISSION

- 7.1) **EMD:** All bidders are required to send Earnest Money Deposit (EMD) of Rs. 10,000.00 through DD. The EMD should be enclosed with the technical bid. Tenders received without EMD shall be summarily rejected. The EMD of unsuccessful bidders shall be returned within 20 days of award of Contract. The EMD of the successful bidders shall be forfeited in case of failure to comply with the work order/ contract terms & conditions.
- 7.2) **Price:** The price quoted should be inclusive of GST. The bidder is required to quote for the total amount of designing including taxes which will be considered for final evaluation. The quotes which are conditional shall not be accepted.

Sr. No.	Description of Work	Total cost
1.	Development of Digital Portal and Dashboard for Noise Monitoring	
2.	Hosting and monitoring of web application at cloud server	
3.	Maintaince Contract for the Period of 3 years	

- 7.3) **Submission of the tenders:** Tender should be submitted hard copies along with EMD details in a sealed envelope. All the sealed tenders (Technical and Financial) together should be enclosed in another sealed envelope super-scribing “Tender for **Development of Digital Portal and Dashboard for Noise Monitoring**”.
- 7.4) Tenders along with application addressed to the Member Secretary, Goa State Pollution Control Board, Near Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao, Bardez, Goa should reach the office of the Goa State Pollution Control Board by 15/03/2024 up to 3.00 P.M. The Board will not be responsible for any tenders, which are held up in the post office.

- 7.5) Submission of tender shall be deemed to be an admission on the part of the bidder, having fully acquainted with the conditions, specifications, etc and no claim other than what is stated in the tender shall be paid in the event of award of Work Order.
- 7.6) **Opening of the Tender:** The tender (Technical Bid) will be opened on 19/03/2024 at 4.00 P.M in the office of GSPCB in the presence of the bidders or their authorized representatives, if any present. Late and incomplete Tenders which do not fulfil tender requirements and/ or if any of the conditions are not complied with, are liable for rejection. Overwriting and corrections should be attested properly.
- 7.7) **Validity of tender:** The tender should be valid for a minimum period of 150 days from the date of opening the tender.
- 7.8) Acceptance of this tender document and submission of the quote within the stipulated time would be treated as:
- 7.9) That the bidder has understood all requirements as described in our Tender Document.
- 7.10) Acceptance to provide all the services mentioned in the tender without price escalation, if the bidder finds it necessary to add any hardware or software during its implementation.
- 7.11) Agreeing to execute the order to the satisfaction of GSPCB or its authorized representative within the stipulated time.
- 7.12) Tenders that do not comply with the above criteria and other Terms and Conditions are liable for rejection.

8. PAYMENT SCHEDULE

- 8.1) No advance payment will be made.
- 8.2) Full Payment on completion of entire delivery of project.
- 8.3) AMC will start from the day dashboard is hand over to Board.
- 8.4) AMC payment will be raised annually for the period of 3 years.
- 8.5) Enhancement or decrease of taxes, duties or prices of components, etc., will not affect the rates during the entire period of contract. No difference shall be paid or claimed as a result of the above.
- 8.6) GST and / or any other applicable taxes and duties will not be paid extra. Hence Taxes should be included in the rates quoted.


9. BANK GUARANTEE

- 9.1) The successful bidder shall furnish an unconditional Performance Bank Guarantee Within three weeks from the date of issuance of Contract, the Contractor shall submit an irrevocable Bank Guarantee (BG) equal to 10% (ten percent) of total CONTRACT value on a non-judicial stamp paper, as "Security Deposit" towards satisfactory execution and performance of the Contract.
- 9.2) The Bank Guarantee shall remain valid till the expiry of (60) sixty days from the completion of the event under this Contract. If need arises, the Contractor shall extend the validity of the Bank Guarantee for suitable period at his expenses.
- 9.3) If the Contractor fails to provide the Security Deposit (SD), within the period as specified in the contract it shall constitute a breach of Contract and the Client shall be entitled to cancel the Contract and make alternate arrangements for the event from other sources at the risk and expenses of the Contractor and recover from the Contractor the damages arising from such cancellation.
- 9.4) In the event, the Contractor fails to fulfil any of the obligations under the Contract; the Client shall have the right to en-cash the Security Deposit.
- 9.5) Where the Contractor fails to maintain the completion time, the Contractor shall extend the validity of Bank Guarantee(s) suitably to cover the extended completion time, failing which, the Client shall have the right to invoke the Bank Guarantee(s) without prejudice to the terms and conditions of the Contract.
- 9.6) Upon satisfactory execution of the Contract, the original Bank Guarantee (s) shall be returned to the Contractor on receipt of a request from the Contractor.
- 9.7) No interest shall be payable on security deposit amount till it is retained by Client in terms of Contract.

10. GENERAL TERMS AND CONDITIONS

- 10.1) The bidder should have Service Centre in Goa. Document proof for the same should be submitted.
- 10.2) GSPCB does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders in which any of the criteria is not fulfilled, without assigning any reason whatsoever.
- 10.3) The final decision regarding acceptance or rejection of the tender will rest with the Chairman, Goa State Pollution Control Board.

- 10.4) Tenders in which any of the particulars and prescribed information are inadequate or incomplete or found to be incorrect in any respect or the prescribed conditions are not fulfilled, are liable to be rejected.
- 10.5) Only Vendors who qualify in the pre-qualification and other eligibility criteria would be shortlisted for financial evaluation.
- 10.6) The Bidder should not have been blacklisted by any Central or State Government, Ministry or Agency for breach of Contractual Conditions as on tender calling date. A declaration should be submitted by the Bidder on letter head as per enclosed format.
- 10.7) The bidder intending to submit the tender shall be a reputed organization in the field of web application creation and android app development and having experience in this field for more than five years, Experience in Central/State Government Department will be preferred. The attested copies of original Work/Supply orders and certificates issued should be submitted.
- 10.8) The bidder firm should furnish and provide latest Income Tax Assessment Certificates.
- 10.9) The service provider / vendor should have GST registration. Documents of GST Registration certificate to be attached.
- 10.10) In case of dispute, the department reserves the right to a final decision on the interpretation of the terms and condition, Scope of Work etc. of this tender notice.
- 10.11) In case of dispute the decision of the GSPCB shall be final and binding on both parties.
- 10.12) Whenever during the period of the maintenance contract, the service of the selected bidder is found to be violating any of the conditions governing the AMC or if the information provided by the firm is found to be false at any point of time, GSPCB has the right to terminate the contract without any compensation.


Dr. Shamila Monteiro
(Member Secretary)
Goa State Pollution Control Board

TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

Tender Reference No:

Date:

To,
Member Secretary
Goa State Pollution Control Board
Nr. Pilerne Fire Station
Saligao Bardez Goa 403511

Sub: Dashboard and Application Development for Noise Monitoring

Sir,

1. I/ We have downloaded/ obtained the tender document(s) for the above mentioned "Tender/ Work" from the website(s) namely: _____ as per your advertisement, given in the above mentioned website(s).
2. I/ We hereby certify that I/ we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc.) which form part of the contract agreement and I/ we shall abide hereby by the terms/ conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter.
4. I/ We hereby unconditionally accept the tender conditions of above mentioned tender\ document(s) / corrigendum(s) in its totality/entirety.
5. I/ We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
6. I/ We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit.

Yours Faithfully,

(Signature with Name of the Bidder, with Official Seal)