

Summary of the queries raised and the responses given during pre-bid meeting held on 27.10.2016 at Board Office, APPCB for supply, commissioning, maintenance of the software required for Data Acquisition and Handling System of Real Time Ambient Air, Stack, Effluent and Noise Monitoring Stations in the State of A.P. against Tender No. 87/APPCB/MIS/AAQM/2010, dt.21.10.2016.

Sr. No.	RFP Document Reference (Vol, Section No., Page No.)	Content of the RFP requiring clarification	Clarification Sought	Clarification
M/s. Wipro				
1	Section IV, Page 7	Monitoring Station	Required to know the no. of monitoring stations to be considered	Please refer IV. B. c of Scope of work. Exact no of monitoring stations varies depending on the number of industries being connected. PCBs monitoring station will also be a part of the total number.
2	Section IV, Page 7	Station Locations	Required to know the list of Monitoring Locations spread across the states	Locations of the monitoring stations depend on the location of the industry which are spread across the state of Andhra Pradesh
3	Section IV A.a, Page 7	Communication method for collection of data	What is the communication method should be used for collection of data from Monitoring devices viz. Wireless, etc	Communication method will be through any of the following methods. GPRS/LAN/Wi-Fi through IoT/Modem device
4	Section IV A.b, Page 7	Data Size	Please specify the Data Packet size from each device or monitoring unit	The data size will be varying from few kbs in respect of CAAQM stations to a continuous stream of video feed from the video cam fixed to monitor the

				working of ETP.
5	Section IV A.c, Page 7	Client / Central Server Licenses for OS / Database	Required licenses for OS and Database should be provided by PCB	The entire software should preferably be an open source. If otherwise, the cost of the License should be included in the quote.
6	Section IV A.d, Page 7	Central Server Software solution	Need to understand whether Intranet / Web Application or Mobile Application to be provided	Please refer to the tender document.
7	Section IV B.q, Page 9	Software Framework and Database	Whether the Application can be developed using Open source Technology and License free Database	The entire software should preferably be an open source. If otherwise, the cost of the License should be included in the quote.
8	Section IV B.i, Page 9	Data Backup	Where is the Regulator server located and whether the regulator server connectivity is Live with the Central Server all times.	Yes - 24 x 7
8	New	Monitoring Device Diagnostics	Whether the application should have any capability to diagnose or to know the working condition of the Monitoring Device	Need not know the health of the monitoring station however need to know whether the power is on / off
9	Section III.B . h, Page 6	Software Developer and Support Engineer deployment	It was asked to deploy for 1 Year at Section III B. h Page 6, but the Costing is asked for 3 years support. Please clarify whether the 1 year support period is part of 3 Years Maintenance	The resource support for a period of three years.
10	New	Development and Implementation period	What is the targetted Delivery and Implementation period.	Immediately within 15 days after award of Work Order.

M/s. Evergreen Technologies (India) Pvt. Ltd.,

1	IV.A.c& d		The central server will only provide the API that will be developed by Limesoft. It is up to the third party software to be able to integrate with this API.?	Configure / integration with the IoT device is the responsibility of the central software developing agency
2	IV.A.k		Source code will be included but the overall price will be substantially higher.	
3	IV.B.e		What kind of parameters has to be remotely configured, except for Calibration?	all gaseous parameters to be remotely configured
4	IV.B.o		If the solution will be hosted on the APPCB premises this requirement is not in our scope	the up and running of the software is the responsibility 7 of the agency for the first 3 years maintenance the but servers will be provided by the APPCB with 24/7 connectivity.
5	IV.B.p		please request more information on the ISO 7168 format	Info on ISO7168 is available on web. This should be complied.
6	IV.C.b		Additional integration charges might be required for any (new) hardware modem	This is not in the scope of work.
7	IV.C.g		Need to be clarified, what exact remote analyzer configuration commands should be implemented?	Depends on the type of equipment. This software should speak to any type of equipment.
8	IV.C.i		Is there a subset of known (supported) analyzers that have to be supported initially?	No
9	IV.C.m		With the requirement to archive data for a period of one year, we will need to have an industrial pc at the client side.	This has to be done from the server side itself. Clint side PC connectivity will not be available.

M/s. Knowledge Lens Pvt. Ltd.,

1	1. Clause I. "General Conditions" point 3. Page no. 2:	Tender fee: Non-refundable tender fee of Rs. 1,000/- (rupees one thousand only) in the form of demand draft drawn from any nationalized bank in favour of Member Secretary, Andhra Pradesh Pollution Control Board shall be enclosed with the technical bid. Bids without tender fee will be rejected out rightly.	Please allow the tender fee to be paid through Scheduled Private Sector Banks (controlled by RBI) too.	The Tender Fee should be paid through any Nationalized Bank Only
2	1. Clause I. "General Conditions" point 4. Page no. 2:	Security deposit (EMD): Rs. 50,000/- (rupees fifty thousand only) in the form of	Please allow the Security Deposit (EMD) in the form of bank guarantee to be paid through Scheduled Private Sector Banks (controlled by RBI) too.	EMD can be paid in form of Demand Draft or Bank Guarantee taken from any Nationalized Bank
3	Clause III. "Eligibility criteria and selection criteria", Sub-Clause "b) Selection Criteria", Heading "Financial quote submitted shall include and satisfy the following:" point h. page no. 6:	bank in favour of Member Secretary, Andhra Pradesh Pollution Control Board	Is the software developer and support engineer over and above the manpower being provided by APPCB?	One software developer and one support engineer should be deployed by the successful bidder for period of three years
4	Clause IV. "Scope of work:" page no. 7:	shall be enclosed with the technical bid. Bids without EMD bank guarantee will	What about effluent and noise monitoring? Does it not comprise the scope of work?	Effluent Monitoring and Noise monitoring is also included in the scope of work.
5	Clause IV. Sub-Clause "Capabilities: A. General" point e. page no. 7:	be rejected out rightly	a.) What kind of encryption is required - Symmetric, Asymmetric, Hashing, etc.? b.) Would a digital key also be used?	Digital encryption should be implemented but the type of encryption will decide later with successful bidder, Software should be capable to support Digital Key/ Digital Signature.

6	Clause IV. Sub-Clause "Capabilities: B. Central Server Software Requirements" point l. page no. 9:	The Central Server Module should be able to support data encryption and security at the server side. The data received from the site should be decrypted and data authenticity ensured.	Any preference for data encryption?	Bidder to provide the encryption algorithm supported by their software.
7	Clause IV. Sub-Clause "Capabilities: B. Central Server Software Requirements" point m. page no. 9:	The Central Server Module should be able to collect data from the industry sites even when one of the central server is down and thus provide redundancy.	Would the redundant server be located at APPCB or can it be provided on cloud outside the APPCB premises? Do we include the redundant server hardware specifications in technical bid and cost in the financial bid or would this server be made available by APPCB?	Redundant server will be provided by APPCB. Hardware cost for the Central Server is not in-scope of the Bidder.
8	Clause IV. Sub-Clause "Capabilities: C. Client Side Software Requirements" point g. page no. 10:	The data collection and transmission module should support remote analyser configuration. The data collection and transmission module should accept remote analyser configuration commands and update the analyser configurations with the set value.	The software will provide these features and functionality but what if the installed analyzer does not have two-way communication and only provides 4-20mA output?	Remote analyzer configuration should be implemented where there is digital communication possible.
9	Clause IV. Sub-Clause "Capabilities: C. Client Side Software Requirements" point i. page no. 10:	Software should support reading analyser configuration and report the configuration changes to the central server. Any configuration changes done at the site should have audit trail and reported to the regulator for approval in the form of workflow.	The software will provide these features and functionality but what if the installed analyzer does not have two-way communication and only provides 4-20mA output?	Remote analyzer configuration should be implemented where there is digital communication possible.
10	Clause IV. Sub-Clause "Capabilities: C. Client Side Software Requirements" point j. page no. 10:	The data collection and transmission module should accept commands for calibration (auto and manual) and able to perform calibration of the analyser locally.	The software will provide these features and functionality but what if the installed analyzer does not have two-way communication and only provides 4-20mA output?	Remote Calibration should be implemented where there is digital communication possible.

11	Clause IV. Sub-Clause “Capabilities: C. Client Side Software Requirements” point m. page no. 10 - 11:	The data collection and acquisition software should be able to collect and encrypt the data locally on the industry site. The data should archive the data locally on the client machine for a minimum period of 1 year or user specified.	Please clarify what is meant by client machine? Is it the data collection and transmission module (data logger) or the instrument or a PC (through which the industry is able to view the data on central server?	It is the data collection and transmission module i.e. data logger / IoT/Modem
12	Clause IV. Sub-Clause “Capabilities: C. Client Side Software Requirements” point p. page no. 11:	The data collection and transmission module should be able to transmit the data over Broadband/LAN/WiFi/GPRS/GSM, etc.	Is only one type of communication medium required or at least 2 communication mediums should be provided as per CPCB guidelines dated 7th November 2014?	Communication mediums like LAN/Wi-Fi/GPRS/ are required to be provided inline with CPCB guidelines
13	Clause IV. Sub-Clause “Capabilities: G. Remote Calibration” point a. page no. 12:	The Web Sever Interface module should support configuration of remote calibration of the analyzer.	Although the software / module will be capable of remote calibration however: Effluent analyzers can not be remotely calibrated as they require different standard / buffer solutions to be used to complete the calibration process. For example pH probe will need to be dipped in buffer solution of ranging value. This would be a manual process. So how to achieve remote calibration of effluent analyzers. Also, the stack / AAQMS would require prearrangements (actuated valves, gases, 2 way communication, etc.) for remote calibration. How would this be achieved with existing equipment where no such arrangement is available.	Software should be capable of Remote Calibration wherever applicable.

M/s. LogicLadder Technologies Private Limited

1	Page 6 Section b)	(a) Cost should include server software, client's software and mobile applications.	The client software may have many features. Many industry specific features and customizations are not included in only connectivity, which may be charged to industry if they want to use those features.	Scope of the tender document shall strictly be adhered to.
2	Page 6 Section b)	(b) All the software, including Source code will be owned by the APPCB. The IPR (Intellectual Property Rights) for the enhancements/ customisation made specifically to APPCB will be owned by APPCB.	There are many components which are licensed and form a part of the system for which the source code may not be available. However if any customized software is developed exclusively for APPCB the ownership may be given to APPCB	The source code of the application software will be property of the APPCB.
3	Page 6 Section b)	c) The client software will be distributed to any number of industries / monitoring stations as per requirement of APPCB.	Please refer remark of Point 1.	Please refer to the remarks given above.
4	Page 6 Section b)	j. The successful bidder shall not supply data Acquisition systems or hardware to any industry in Andhra Pradesh.	We provide many kinds of hardware that are sold across the country. This clause tends to restrict the business activity for no reason. More so, this clause also amounts to "restraint of trade" and is in violation of the Section 27 of the Indian Contracts Act, 1872 and does not hold good in law.	Scope of the tender document shall strictly be adhered to.
5	Page 8. n	n. Should have provision to share the database with the CPCB server database as and when required.	Does this mean API integration?	This will be decided based on the requirement of CPCB.

6	Page 9 C	C. Client Side Software Requirements	Why is client software part of the scope? Most industries have complex setups and clients would require customization. Who pays for this customization? One client meet all Industry requirement is not possible. The bidder is prohibited from supplying client to the Industry so this is contravention of clause 16 on page 3.	Scope of the tender document shall strictly be adhered to.
7	Page 9. h	h. The Central Server Module should be able to send pre-configured template based SMS and Emails for alerts and alarms generated based on the configured rules. This feature should be built in capability of the Central Server Module and not external application software.	Technically this can be done. However an external SMS gateway e.g. Airtel will have to be used to send SMS. Who pays for the SMS cost? If SMS are in bidder's scope, what are the projections for number of SMS that needs to be send?	this is not in the scope of work.
8	Page 9. m	m. The Central Server Module should be able to collect data from the industry sites even when one of the central server is down and thus provide redundancy.	Do we require N+1 redundancy or just a two server redundancy.	Since the provision of servers is not in the scope of the work but the software provision of backup data and the synchronization mechanism between disaster recovery server
9	Page 9. p	p. The Central Server Module should support data export in ISO -7168 format.	ISO-7168 standard is for Air Quality data exchange . Do you only want Air quality data to be exported in this format?	The server module should meet the requirements of Air, Water & Noise data exchange.
10	Page 10. b	b. The Client side software should be the Client hardware independent should be compatible to any hardware modem the software should be open	Making a client that works on any modem is technically not possible. Some modems would not even allow flashing of a third	The software should interact with all the generic modem that are available in the market.

		to any hardware modem.	party application on them. The specification of these modems should be defined. This condition is technically incorrect.	
11	Page 10 g,h,i	<p>g. The data collection and transmission module should support remote analyser configuration. The data collection and transmission module should accept remote analyser configuration commands and update the analyser configurations with the set value.</p> <p>h. Each measurement should be associated with the data quality code inferred while data collection and the data quality code should be transmitted along with the data. The data quality code should indicate analyser failures, analyser communication failures, etc.</p> <p>i. Software should support reading analyser configuration and report the configuration changes to the central server. Any configuration changes done at the site should have audit trail and reported to the regulator for approval in the form of workflow.</p>	Remote configuration is not possible on all analyzers type. E.g. Remote calibration in analyzers with analog interface is not possible. Would these be exempted from this clause.	Software should be capable of Remote Calibration wherever applicable.
12	Page 10 J	j. The data collection and transmission module should accept commands for calibration (auto and manual) and able to perform calibration of the analyser locally.	What does manual calibration mean?	Can be read as auto calibration only.

13	Page 10 k	k. The data collection and transmission module should be able to collect the data directly from the analyser with a minimum scan interval of 10 seconds.	Why a scan interval of 10s is required? Most analyzers like effluent have an analysis time which is greater than this. CPCB also requires one minute scan with averaging over 30 minutes. http://cpcb.nic.in/FinalGuideline.pdf Clause 5, Page 17	Scope of the tender document shall strictly be adhered to.
14	Page 11 m	m. The data collection and acquisition software should be able to collect and encrypt the data locally on the industry site. The data should archive the data locally on the client machine for a minimum period of 1 year or user specified.	What does the term "client machine" mean when modem has to be used? Please define the term. Is this is a PC?	Client machine means any IoT/modem/data logger.
15	Page 11 t	t. The Central Server should publish an open Application Programming Interface (API) to support different client side software. Any vendor supplying the data collection and transmission module should comply with the API. The client side software requirement shall be demonstrated at APPCB. Data transmitted only from such demonstrated and proven client software will be accepted by the Central Server Module. Establishing connectivity between the client and central software is the responsibility of the service provider.	As per clause 16 on Page 3 the bidder is not authorized to supply the client to Industry then how can he take responsibility for establishing connectivity with client. This should not be in the scope of bidder. This should be in the scope the company providing the client to the Industry.	Establishing the connectivity shall be done remotely from server end, required software tools and configurations has to be of Client software
16	Page 12 g	G. Remote Calibration a. The Web Server Interface module should support configuration of remote calibration of the analyzer.	Remote calibration has serious safety issues if done automatically or in a scheduled fashion. This should not be done without the	This issue will be taken up at the appropriate time. The software should be capable enough to remotely calibrate

		<p>b. The Web Server Interface module should have the ability to provide the various manual/online calibration sequences, schedules for remote calibration and reports.</p> <p>c. The Web Server Interface module should support calendar view of all the automated calibration schedule and sequence.</p>	Industry intervention.	the instrument.
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