

MINUTES OF PRE BID MEETING ON “Design, Configuration, Installation, Integration & Maintenance of Sensor based IoT Solution for Smart Manhole Monitoring in Hyderabad Metro Water Supply & Sewerage Board (HMWSSB)” HELD IN Chambers of Director (Technical), 2nd Floor, HMWS&SB Front Administrative Building, Khairtabad. Dt.14.05.2018 @ 3.30pm.

“EOI NO:02/CGM(E)/PCC-III/RF/EDP/2018-19, Dt:09/05/2018”

Sl.no	Queries of the agencies	Reply
	e-ccentric Solutions Pvt. Ltd.,	
1	GIS Platform for Manhole location will be provided by HMWSSB?	Final system configuration will be devised at RFP Stage.
2	Is the GIS Site Survey already done	If details are required HMWSSB will provide at RFP stage
3	Is a GIS layer already published for sewerage lines?	for IOT solution this is not required
4	Should GIS Platform Licenses and GIS development services be considered in the costing or not?	for IOT solution this is not required
5	Are the lids cement or iron? If yes, how many cement and how many iron?	Major FRC covers , few Number having CI Covers
6	Should hosting on cloud be only in India? or will HMWSSB provide cloud?	India only (As per govt policy on premises is preferred for application). For POC purpose Cloud can be used preferable India. For Final Implementation, Infrastructure will be taken care by ITE&C Department.
7	Should we consider or not consider the server and/or hosting charges?	For POC stage server costing should be borne by the bidder. For Final Implementation, Infrastructure will be taken care by ITE&C Department.
8	Doesn't this hosting require a DR (Disaster Recovery), if yes, where?	For POC this is not required. For Final Implementation, Infrastructure will be taken care by ITE&C Department.
9	Will Lora or any other network be provided by HMWSSB?	Final system configuration will be devised at RFP Stage.
10	Should the platform support SOPs?	Yes

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11	Assuming the devices for Mobile App is not in scope of MSI?	Devices need not required to be provided to field staff, only Mobile application should be provided Mobile App may be showcased at EoI for demo. Final system configuration will be devised at RFP Stage.
12	How many manholes should the system be able to support overall? Should the proposal, server sizing be given only for the current 266?	It should be scalable, there around 2 lakh manholes in Hyd, department is planning to adopt solution in phased manner as per results and outcome. Infrastructure will be taken care by ITE&C Department. Infrastructure Requirement should be proposed at RFP Stage by Bidder. Final system configuration will be devised at RFP Stage.
Techuva Solutions Pvt. Ltd		
1	Request you to please give relaxation on "should have experience of ". We have done wide spectrum of projects on sensor based IoT projects., however value of any project is not 50 Lakhs. We have done 2 projects with value more than 10 Lakhs	Criteria Relaxed as mentioned below : Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of at least 1 Sensor based IoT Project of more than 10 Lakhs, in any of the last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors <ul style="list-style-type: none"> •Central/State Government •PSUs •Boards/Municipalities • Reputed Private Organization
2	We are a startup, established in 2016 March, however our Consortium partner is g+ years company. Please provide us relaxation on this point	Mention him as prime bidder under consortium
3	Should we submit Consortium document and Power of Attorney along with Technical proposal or before that	Along with Technical Bid only
4	Could you please give us the list of 266 manholes and the location of the same, so that it will help us to	List will be provided at POC stage

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	map/come up with the best and cost effective communication model	
5	Can we get the full list of gases to be identified other than H2S and Methane for Hazardous Gas Detection, and can the gases be detected with a hand-held device, which the team would carry during maintenance.	Only H2S and Methane which are harmful, agency may explore any other and submit for department review.
6	For the command center platform, how many users we need to give login access	for POC only one User is enough More details will be provided at RFP Stage
7	What kind of alerts you are looking for Web based/Mobile or SMS	Push notification in mobile app, SMS alerts, Alarms to local people under emergencies. System configuration will be finalized at RFP stage.
8	Once we place the Sensors and our communication model in the manholes, and if they are lost due to theft, how do we go about it	Sensor/Device Theft alert can also be given. Final configuration will be devised at RFP Stage.
9	Hosting of application, can we do it on our cloud server or will it be on HMWSSB or it will be in HMWSSB local premise	For POC host application in cloud Department will provide the infra details at RFP stage
10	Will the SIM cards would be procured by HMWSSB or the prime bidder?	At EoI Stage, vendor has to arrange all the resources to showcase solution features. Final system configuration/system components will be devised at RFP Stage.
11	Will HMWSSB give the terminal device location?	Yes
12	Type of certification you are looking for sensors	Any Central or State Government/Private Certification is acceptable for technical evaluation stage of EoI. Final specifications will be devised at RFP Stage.
13	Civil work involved during the installation of the IoT device will be taken care by HMWSSB or the company which is installing. (which will have the impact on final costing)	Bidder responsibility, HMWSSB will provide supervising staff for assisting on location

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14	What is the timeline for completing the project for 266 sites	Timeline will be given at RFP Stage, estimated timeline is less than 30 days. Components procurement lead time will be considered while finalizing the timelines.
15	Monthly charges for Data and SIM Rental would be the responsibility of the prime bidder or HMWSSB.	At EoI Stage, vendor has to arrange all the resources to showcase solution features. Final system configuration will be devised at RFP Stage.
16	Is the quotation inclusive of O&M or a separate quotation should be submitted	O&M should be given at RFP Stage, not at EoI Stage. Details given in EoI.
17	In the quotation Software, Hardware, Sensors and Service should be included as one, or as separate sections.	Details Not to be given at EoI Stage, would be required at RFP Stage.
18	Can any of the partner become prime bidder.	Yes, turnover criteria will mandatorily apply on prime bidder
Relgo Networks Pvt ltd		
1	Relaxation to 5cr turnover	Criteria Relaxed and is as read below The Bidder or Prime Bidder should have Minimum annual turnover of Rs. 2 crores in Software or IoT implementation /maintenance, for each of the last 3 financial years i.e. 2014-15, 2015-16 & 2016-17
2	Relaxation in 2 IOT implementations with 50lakhs	Criteria Relaxed and is as read below Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of at least 1 Sensor based IoT Project of more than 10 Lakhs, in any of the last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors •Central/State Government

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		<ul style="list-style-type: none"> •PSUs •Boards/Municipalities • Reputed Private Organization
3	Relaxation POC demo time period of 5weeks minimum	<p>Timeline will be given at RFP Stage, estimated timeline is less than 30 days.</p> <p>Components procurement lead time will be considered while finalizing the timelines.</p>
4	Would prefer cloud service based solution as number of analytics and support services are already integrated	For POC host application in cloud ,department will take provide the infra details at RFP stage
Idea bytes Inc		
1	<p><u>Allowing Foreign Entity in the Consortium partner:</u> To leverage best in class IoT technologies, we proposed to use Foreign entity as “Consortium Partner” and with Prime Bidder having office in Hyderabad from past 9+ years. Hence we are proposing to form consortium with IoT Platform company who is recognized as “Cool IoT Platform Vendor” by Gartner in their 2018 report</p>	Prime bidder should be from India having local office in Hyderabad. And consortium can be outside India where partner should have local branch India preferably
2	<p><u>IoT Expertise:</u> – IoT deployments are just started in India and the Boom has just begun after smart city initiative from Central Govt. initiative. So providing Rs. 50 Lakhs worth of IoT Project will be difficult to most companies . But we have been working with Telangana Govt in IoT project initiatives and we also got appreciated for the solution demos and also deployed Smart Environment pilot sensors at Karimnagar Municipality</p>	<p>Criteria Relaxed and is as read below</p> <p>Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of at least 1 Sensor based IoT Project of more than 10 Lakhs, in any of the last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors</p>

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3	<u>Annual Turnover:</u> Exemption to reduce to annual revenues to 3 Crores to accommodate small companies and start-up companies who have been working in IoT and Niche technologies	Criteria Relaxed and is as read below The Bidder or Prime Bidder should have Minimum annual turnover of Rs. 2 crores in Software or IoT implementation /maintenance, for each of the last 3 financial years i.e. 2014-15, 2015-16 & 2016-17
4	<u>POC Lead time to demo:</u> 6 to 7 Weeks as it takes 4 weeks to import Hardware & sensors for Calibration or Certification	Maximum One Month can be given, since Monsoon is approaching. Timelines will be given at the completion of technical evaluation stage, to technically qualified vendors.
5	<u>Certification Exemption for the Pilot phase:</u> Please suggest if any specific agency for Sensors certification in India or any Private body certification is sufficient. And request to exempt the certification during Pilot phase as any certification process is long drawn process	Any Central or State Government/Private Certification is acceptable for technical evaluation stage of EoI. Final specifications will be devised at RFP Stage.
6	<u>Additional one week for submission of the Tender :</u> We have to get necessary documents like Experience Letter, Letter of Undertaking from Consortium Partner	Not accepted
7	<u>Pre-Qualification Evaluation Phase in Page16:</u> Request for clarity on Sensor IoT Project Expertise & Functional Expertise – Two different check points mentioned. But both are meant to be same and expected document as proof is also same	As per EOI criteria only Submit same documents separately for both the criteria
Neumeric Technologies		
1	What is the Certifying Authority to get the Sensors Certified?	Any Central or State Government /Private Certification is acceptable for technical evaluation stage of EoI.

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		Final specifications will be devised at RFP Stage.
2	Can one of the partners be out of the Country and does that Company need to be registered in India?	Prime bidder should be from India having local office in Hyderabad. And consortium can be outside India where partner should have local branch India preferably
3	Since the RFP mentions about H2S and Methane, there are calibration and recovery/reset issues associated with it. Is the Gas Detention Sensors Mandatory? If yes, do we need to include the calibration/recovery/reset also included as part of the POC? If No, can we ignore the Use Case and will that impact our chances on the winning the Bid?	All features should be completely demonstrated then only department can evaluate, as this is 1 st of its kind solutions in India
4	Through these solutions, is the department open to accept 'a substitution of manhole covers, with sensor enhanced covers' (i.e. replace manhole covers with sensor enhanced covers)	Not allowed
5	How will we differentiate between an authorized personnel opening the manhole vs theft of the manhole? Or how will the personnel authorize himself with the sensor without human intervention?	Maintenance Schedule of the Staff can be integrated with the system to address the issue
6	Mobile application - Does the target audience include field-level supervisors who will complete the manhole installation/repair and report the work real-time?	Yes, At EoI Stage, Mobile App showing alerts is acceptable. Final system configuration will be devised at RFP Stage.
BANDGi Technologies		
1	What are the different types of manhole where the IoT Smart Device will be installed [Service Box / Sewerage]?	Sewerage System
2	What are the different types of manhole covers and shapes [vented / solid / Cast Iron / RCC Cement / Round / Square]?	FRC Covers and Cast Iron Covers in Circular shape
3	What is the indicative range (average) depth of the manhole from road level ?	0.5 to 5 Meters
4	If there are permissions required from other government departments for installations of Devices/Communication network will there be Single point from HMWSSB for coordination?	HMWSSB will coordinate if required
5	Any other information deemed useful.	Not related query

Sl.no	Queries of the agencies	Reply
6	What should be the maximum dimension of the IoT Smart device to be built?	No bar dimensions ,preferably as minimum as possible
7	Is the IoT Smart Device should be IP68 rating (water tight)? Should it also function in the flood conditions?	Yes
8	Should the IoT Smart Device withstand certain pressure (Blast proof) – specify any limits if necessary.	May subjected to water Jet pressure while cleaning
9	Are there certain manufacturing specifications for casing/enclosure of the unit ?	Any Central or State Government/Private Certification is acceptable for technical evaluation stage of EoI. Final specifications will be devised at RFP Stage.
10	Sensor List: Tamper Cover detection: Overflow flood Detection: Gaseous sensor: H2S, Methane. Do we have technical parameter requirements on these one like accuracy/tolerance and max/min capacity? For e.g.: Methane 1000 ppm?	Based on results of POC department will decide the parameters and final parameters will be devised at RFP stage
11	Additional sensors available or can be included in the unit: 1) Temperature. 2) Carbon monoxide (Co). 3) Smoke detection. 4) Electric Arc detection 5) Pressure sensor. 6) Humidity. 7) Salinity 8) Ground Temperature. Stray voltage	Yes, at EoI/POC stage. Additional features more than EOI can be the discretion of Agency Final system configuration will be devised at RFP Stage.
12	Any other sensor to be considered which are not listed above	Preferable 3 sensors as per EOI
13	From the Device to Server → IoT smart device is capable of 3G / LTE communication. Is there specific requirement to have Device =>Gateway=> Server Model? Our devices can directly communicate with Server via 3G/LTE.	As 3g/4g power consumption is high compared to gate way based solution like LoRa-wan, department is looking for low power consumption iot devices with less maintenance.

Sl.no	Queries of the agencies	Reply
		Functional requirement is to communicate the alerts to server with low power consumption
14	From Device to server the traffic is encrypted with AES -256 cipher and transmitted using VPN (no public internet traffic). Please specify if there any further security requirements	Encryption Specification will be given at RFP stage
15	Hosting of the server(s) and the data should it be within state or country (India)?	For POC host application in cloud Infrastructure will be taken care by ITE&C Department.
16	Can IOT Smart device hosting be cloud offering?	For POC host application in cloud, Infrastructure will be taken care by ITE&C Department.
17	Dashboard is web based and mobile app can be as an add on?	No include in the end to end solutions
18	What are different types of Users/Departments expected to use these applications? Is their requirement to integrate with existing user database of state government IT?	for POC only one User is enough More details will be provided at RFP Stage
19	Alarms can be configured based on individual sensors, notification sent over email and SMS	Both
20	To be able to integrate with existing application of HMWSSB, please specify the technology stack. Is the integration is also in scope of solution	For POC no integration is included, where as solution should be able to integrate with cross platform application More details will be provided at RFP Stage
21	In case premise based hosting is required, space for data centers and other logistics is it in the scope for bidding response?	For POC host application in cloud Infrastructure will be taken care by ITE&C Department. More details will be provided at RFP Stage
PASS Consulting Group		
1	The Bidder or Consortium Partner should have Technically	As per EOI prequalification criteria only, Consortium

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	Qualified and well experienced strong in- house resource base on company role, Minimum 10 employees instead of 30 with >=3 years of experience in implementation of sensor based IoT solution or software solutions implementation	permitted
2	Sensor -IoT project Expertise: The bidder or experience partner should have experience of Design, Implementation, Integration & Maintenance of minimum 2 Sensor based IoT / Sensor based automation project, each more than 50 Lakhs , in last 3 financial years i.e. 2015 - 16, 2016 - 17 & 2017- 18, in the following Sectors: central/ state government PSUs Boards/Municipalities Reputed Private Organization	<p>Criteria Relaxed and is as read below</p> <p>Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of at least 1 Sensor based IoT Project of more than 10 Lakhs, in any of the last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors</p> <ul style="list-style-type: none"> •Central/State Government •PSUs •Boards/Municipalities • Reputed Private Organization
3	Functional Expertise: The bidder or consortium partner should have executed minimum one relevant sensor based IoT/one relevant Sensor based automation project, in last 3 financial years i.e. 2015-16, 2016-17, 2017 - 18, in the following domains: Public safety, Industrial safety, Smart city, manhole management, Water distribution , Disaster management etc	As per EOI only
4	The Bidder or Consortium Partner should have minimum annual turnover of Rs. 2 Crores in Software or IoT implementation/ maintenance, for each of the last 3 financial years i.e. 2015-16, 2016-17& 2017-18	<p>Criteria Relaxed and is as read below</p> <p>The Bidder or Prime Bidder should have Minimum annual turnover of Rs. 2 crores in Software or IoT implementation /maintenance, for each of the last 3 financial years i.e. 2014-15, 2015-16 & 2016-17</p>

Sl.no	Queries of the agencies	Reply
FERVID MEDIA TECHNOLOGIES		
1	If Gateway can be eliminated and send sensor data directly to the server, do we lose any marks in the Evaluation parameters. There are certain technologies where Gateway is not required for pushing sensors data	As 3g/4g power consumption is high compared to gate way based solution like LoRa-wan, department is looking for low power consumption iot devices with less maintenance
2	Are all the three sensors required per manhole for future implementations. For example, every manhole will have cover removal sensor. A few critical manholes will have poison gas sensors. Some will have level sensors based on hydraulic modeling	All three sensors for all the manholes proposed to implement
3	Request for (45) days for doing PoC from the date of Bid submission Minimum lead time required for procurement of sensors and customization of application	2 weeks from the date of issue of POC shortlist communication from the department
4	Types of Manhole covers, The solution varies depending on the type of material used for manhole	FRC Covers and Cast Iron Covers
5	What kind of Industry Standards & Certifications to be required? Request to mention, if there are any specific standards required. Quality of data varies based on the standards	<p style="color: red;">Any Central or State Government /Private Certification is acceptable for technical evaluation stage of EoI.</p> <p>Final specifications will be devised at RFP Stage.</p>
6	Request you to consider companies registered under “STARTUP INDIA” program for relaxation as per the Memo and GOs issued for consideration of STARTUP to participate in tenders as specified by GoI	<p style="color: red;">Criteria relaxed and read as below</p> <p>Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of at least 1 Sensor based IoT Project of more than 10 Lakhs, in any of the last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors</p> <ul style="list-style-type: none"> •Central/State Government •PSUs •Boards/Municipalities • Reputed Private Organization

Sl.no	Queries of the agencies	Reply
		<p data-bbox="1197 247 1782 279">Criteria Relaxed and is as read below</p> <p data-bbox="1197 351 2116 451">The Bidder or Prime Bidder should have Minimum annual turnover of Rs. 2 crores in Software or IoT implementation /maintenance, for each of the last 3 financial years i.e. 2014-15, 2015-16 & 2016-17</p>

Sd/-

DIRECTOR (Technical)

Corrigendum on Qualification Criteria

Page no	Clause	Qualifying Criteria	Changed Qualifying Criteria
17	Phase I (Pre-Qualification criteria)	<p>Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of minimum 2 Sensor based IoT Project, each more than 50 Lakhs, in last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors:</p> <ul style="list-style-type: none"> • Central /State Government • PSUs • Boards/Municipalities • Reputed Private Organization 	<p>Sensor-IoT Project Expertise: The Bidder or Consortium Partner should have experience of Design, Implementation, Integration & Maintenance of at least 1 Sensor based IoT Project of more than 10 Lakhs, in any of the last 3 financial years i.e. 2015-16, 2016-17 & 2017-18, in the following sectors:</p> <ul style="list-style-type: none"> • Central /State Government • PSUs • Boards/Municipalities • Reputed Private Organization
18	Phase I (Pre-Qualification criteria)	<p>The Bidder or Consortium Partner should have Minimum annual turnover of Rs. 5 crores in Software or IoT implementation /maintenance, for each of the last 3 financial years i.e. 2014-15, 2015-16 & 2016-17.</p>	<p>The Bidder or Prime Bidder should have Minimum annual turnover of Rs. 2 crores in Software or IoT implementation /maintenance, for each of the last 3 financial years i.e. 2014-15, 2015-16 & 2016-17.</p>

Sd/-
DIRECTOR (Technical)