## पटना स्मार्ट सिटी लिमिटेड پٹنه اسمارٹ سیٹی لمیٹیڈ PATNA SMART CITY LIMITED



Letter No. / पत्रांक : 1187-...

Date / दिनांक : . 3 7 2019

## **CORRIGENDUM-01**

NIT No.- 13/MD/PSCL/2019

Dated-06.06.2019

### **Request for Proposal for**

"Selection of System Integrator for Design, Development, Implementation and Operation & Maintenance of Integrated Solid Waste Management System in Patna Municipal Area" under Smart City Mission.

Prospective bidders are advised to take note of the following changes (given in first 3 parts) together with technical specifications of RFID reader and Volume Sensor given in the fourth part (which was not provided in the RFP earlier), while submission of bids; which are in the accordance with the pre-bid replies uploaded earlier on the website:

#### PART-1:

Activity	As per RFP	Revised as
Online Sale/Download date of	From 15.06.2019 (10:00 Hrs) Till	From 15.06.2019 (10:00 Hrs) Till
Tender documents	5.07.2019 (17.00Hrs)	12.07.2019 (14:00Hrs)
	(www.eproc.bihar.gov.in)	(www.eproc.bihar.gov.in)
	(Under Patna Nagar Nigam)	(Under Patna Smart City Ltd.)
Last date for submission of Bids (online) and hard copy.	06-07-2019 Till 15.00 Hrs	12-07-2019 Till 15.00 Hrs
Opening of Technical Bids	07-07-2019 At 16:00 Hrs	13-07-2019 At 16:00 Hrs
Cost of Bidding Document	1	Tender fee, Rs. 10,000/- to be paid in
(Tender Fee)		the form of Demand Draft in favor
	Rs. 10,000/- to be paid through online	of Managing Director, Patna Smart
	mode on	City Limited payable at Patna.
	http://www.eproc.bihar.gov.in/BELT	Hard copy of DD needs to be
	RON	submitted along with hard copy of
		EMD in PSCL, however, scanned
		copy needs to be uploaded on
		http://www.eproc.bihar.gov.in/BEL
		TRON

#### PART-2:

Activity	As per RFP	Revised as	
3.5: Pre-Qualification Criteria- Bidder's competence on turnover from SI services:	The Bidder's average annual turnover from services related to Solid Waste Management Solutions & Integration during each of the last 3 audited financial years (2015-16, 2016-17, 2017-18) shall be 3 Crores	The Bidder's average annual turnover from services related to Solid Waste Management Solutions & Integration during the financial years 2015-16, 2016-17 and 2017-18 shall be 3 Crores.	
3.5: Pre-Qualification	1. Grievance Redressal System	1. Grievance Redressal System	
Criteria- System	2. Role Based Mobile App across SWM	2. Role Based Mobile App across SWM	
functionality: The bidder	hierarchy	hierarchy	
will be marked on the basis	3. Fleet Management system including	3. Fleet Management system including	
of number of features	driver's app, route planning, re-routing,	driver's app, route planning, re-routing,	
present as a part of COTS	alerts, destination information, etc.	alerts, destination information, etc.	
(Financially-off-the-shelf)	4. Billing system for vendors of Municipal	4. Billing system for vendors of Municipal	
MSWM solution:	Corporation	Corporation	

	5. Attendance management including its biometrics for Field Workers 6. Integration with IoT devices compulsorily including Smart bins and automated weighbridge application 7. Dashboards and MIS for SWM system with Role Based Access Control and ranking module for people, divisions, etc. 8. Integration with SMS and Emails 9. Ability to host both on cloud and on inpremise system 10. Bilingual platform (compulsory languages – English & Hindi) configurable for each user.	5. Attendance management including its biometrics for Field Workers 6. Integration with IoT devices compulsorily including Smart bins/vehicle and automated weighbridge application 7. Dashboards and MIS for SWM system with Role Based Access Control and ranking module for people, divisions, etc. 8. Integration with SMS and Emails 9. Ability to host both on cloud and on inpremise system 10. Bilingual platform (compulsory languages – English & Hindi) configurable for each user.
	Note: 2 marks will be awarded based on the availability of features in proposed solution.	Note: 1 marks will be awarded based on the availability of features in proposed solution.
3.5: Pre-Qualification Criteria-Training	Trainings proposed by the vendor and the amount of emphasis laid on Training the employees schedule details, locations, sessions and their description  Marks will be awarded as per the details	Trainings proposed by the vendor and the amount of emphasis laid on Training the employees schedule details, locations, sessions and their description  Marks will be awarded as per the nature
	below.	and module of training.
25 B C FC	Max Marks: 7	Max Marks: 10
3.5: Pre-Qualification Criteria- Certifications	The bidder must have following certifications: ISO-9001: 2008 or above	The bidder must have following certifications: ISO-9001: 2008 or above.
	Max Marks: 8	Max Marks: 10
3.5: Pre-Qualification Criteria- Bidder's experience in sensor technology	Marks will be awarded as per the nature of project and experience. Bidder should have experience of implementing software solution related to Solid Waste Management in any ULB/Government in India in last five years as on publication of RFP with minimum project value of Rs. 1 Cr. OR Bidder should have experience of implementing RFID based solution for fleet management in India for any ULB/Central /State Govt Departments/PSU in last five years as on publication of RFP with minimum project value of Rs. 1Cr.	Marks will be awarded as per the nature of project and experience.  Bidder/OEM should have experience of implementing software solution related to Solid Waste Management in any ULB/Government in India in last five years as on publication of RFP with minimum project value of Rs. 1 Cr. OR Bidder should have experience of implementing RFID based solution for fleet management in India for any ULB/Central /State Govt Departments/PSU in last five years as on publication of RFP with minimum project value of Rs. 1 Cr.
3.5:Pre-Qualification Criteria-Industry specific capabilities	The bidder must have successfully completed similar projects in India/globally in last 3 years:  Note: Definition of similar nature projects is as follows:  Project which involves development, deployment, integration and technical support for SWM System of a municipality/urban local body/government urban development authority.  Weightages:  In case project is completed (implementation and O&M) as per specified scope and the letter of satisfaction from the client is available: 100 % marks  In case project is in progress and the letter	The bidder/OEM must have successfully completed similar projects in India/globally in last 3 years: Note: Definition of similar nature projects is as follows: Project which involves development, deployment, integration and technical support for SWM System of a municipality/urban local body/government urban development authority. Weightages: In case project is completed (implementation and O&M) as per specified scope and the letter of satisfaction from the client is available: 100

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of completion of implementation phase is % marks available from the client: 80 % of specified In case project is in progress and the letter of completion of implementation phase is available from the client: 80 % of specified marks 5.1 Scope of Work The Smart Solid Waste Management 1. 1. The Smart Solid Waste Management System shall enable the level of solid System shall enable the level of solid waste, recycled waste, to be remotely waste, recycled waste, to be remotely monitored using wireless sensors monitored using wireless sensors installed inside the waste bin/ Vehicles. 2. installed inside the waste bin. Registration/Geo-tagging and smart 2. Registration/Geo-tagging and smart monitoring of all garbage bins/ monitoring of all garbage bins and Vehicles and points. RFID based system shall allow real-3. time tracking of waste collection RFID based system shall allow real-time tracking of waste collection system system efficiency Registration/Geo-tagging and smart Registration/Geo-tagging and smart monitoring of all Temporary Transit monitoring of all Temporary Transit Station (TTS). Station (TTS). Smart mechanism for registering, 5. Smart mechanism for registering, monitoring and efficient and quick monitoring and efficient and quick redressing of citizen grievances. 6. redressing of citizen grievances. 6. Implement a GIS/GPS enabled Solid Implement a GIS/GPS enabled Solid Waste Management System to Waste Management System to automate automate the entire process including the entire process including online online tracking of waste collection tracking of waste collection vehicles, vehicles, their routes, and temporary their routes, and temporary transit transit stations (TTS) and attendance stations (TTS) and attendance of public of public health workers. health workers. Web based monitoring of each type of Web based monitoring of each type of waste disposal separately. waste disposal separately. Is solid waste collected properly from Is solid waste collected properly from the bins? Is the weight/volume of the waste the bins? Is the weight of the waste correct? correct? Tracking of solid waste with necessary Tracking of solid waste with necessary checks-and-balances. checks-and-balances. 10. Process management of people, vehicles Process management of people, and other components involved to be vehicles and other components monitored. involved to be monitored. 11. Daily, weekly, monthly reports on item-11. Daily, weekly, monthly reports on wise, dept. wise and activity wise details item-wise, dept. wise and activity wise and the Consolidated Report generation details and the Consolidated Report on solid waste management site activity generation on solid waste management through the Command and Control site activity through the Command and Center should be made available with Control Center should be made the real time captured data. available with the real time captured Decision support system that monitor data. process compliance, efficiencies and 12. Decision support system that monitor SLA monitoring shall be part of the process compliance, efficiencies and project. SLA monitoring shall be part of the project.

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### PART-3:

Sr No	Item as per Bill of Material	As Per RFP	Revised As
1	RFID Tags	3,00,000	3,00,000
2	RFID Reader Hand Hold	380	155
3	SWM Solution	As per scope of work	As per scope of work
4	Mobile Application	As per scope of work	As per scope of work
5	User Charge Collection System	As per scope of work	As per scope of work
6	Volume Sensors	250	250
7	GIS Route Map of Patna Municipal Corporation Area	As per scope of work	As per scope of work

# PART-4: Technical specification of Volume Sensor & RFID Reader:

Volume Sensor Specifications	nercif genefinal the to gorrenner	
Measurement Sensor	40KHz Ultrasonic sensor	
Beam opening sensor measurement	Taugo lano manda di mana 30°	
Depth Range	25cm – 450cm	
Resolution	2cm	
Enclosure Material	Completely Waterproof and Dustproof Enclosure Tough Polypropylene Plastic	
Dimensions	96mm(L) x 70mm(W) x 35mm(H)	
Weight	Approx 300g (with batteries)	
Operating Temperature	(-)20C to +85C	
Power	Battery Operated (non-rechargeable)	
Battery Type/Size	Lithium Iron Disulphide/ Lithium Thionyl Chloride	
Battery Lifetime	10 years	
Battery Level Monitor	Battery charge state is monitored	
Communications	Quad-band GSM/GPRS Engine EGSM 900MHz and DCS 1800MHz GPRS coding schemes CS-1, CS-2, CS-3 and CS-4	
Antenna	Internal antenna	
Data Logging	To User or Cloud based servers	
Remote Configurability	Remotely Configurable Threshold Parameters like Bin Height, Polling Interval, Bin threshold levels for sending alarms	
Optional Sensors	Can be optionally fitted with Temperature Sensor, Tilt Sensor and Accelerometer	
RFID Reader Specifications		
Dimensions	192mm x 87mm x 151mm/ 7.56 x 3.43 x 5.94in	
Weight	456g	
Display	4" WVGA (480*800), 16.7M colors	
Keypad	TIO THAME AUTOS 4 TP touch key-press buttons	

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Battery	Main battery: Li-ion, 4000mAh	
Sensors	Light Sensor, Proximity Sensor	
OS	Android 4.4	
CPU	Cortex-A7 1.3GHz quad-core	
RAM + ROM	1GB + 4GB	
Operating Temperature	14°Fto 122°F / -10°C to 50°C	
Storage Temperature	-40°F to 158°F / -40°C to 70°C	
Humidity	5%RH - 95%RH non condensing	
Drop	Multiple 1.2m drops to concrete	
Tumble	1000 x 0.5m/1.64ft falls at room temperature	
Sealing	IP64	
Radio Frequency Band	GSM/GPRS/EDGE Quad Band (850/900/1800/1900MHz)	
WLAN	IEEE802.11 b/g/n	
WPAN	Bluetooth 4.0	
WCDMA		
CAMERA		
Development Environment		
GPS	GPS, AGPS	
PSAM	2 PSAM slots(maximum)	
Barcode Scanner	1D- SE965, 2D - Zebra SE4750	
RFID	UHF Circular polarization (4dBi), Range - 8 M	
NFC	ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc., 2-4cm Range	
Other Features	Biometrics	

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