



### PATNA SMART CITY LIMITED

#### REQUEST FOR PROPOSAL NIT No. - 01/MD/PSCL/2020

Patna Smart City Limited invites online bids/RFP for selection of "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System for Patna Municipal Corporation Area" as per following schedule: -

Sl.	Activity Timeline	
1.	Online <b>Sale/Download</b> period of RFP/Tender documents	From 18.08.2020 to 07.09.2020 (15.00 Hrs.) https://eproc.bihar.gov.in/
2.	Last date and time for submission of bids online	Till 15.00 Hrs. on 08.09.2020
3.	Date & time of <b>pre-bid meeting</b> at PSCL office on 5 <sup>th</sup> Floor, Biscomaun Tower, Patna 800001	At 15.00 Hrs. on 25.08.2020
4.	Last date and time for submission of original EMD & DD (RFP fee)	Till 16.00 Hrs. on 08.09.2020
5.	Date and time of opening of Technical bid	At 11.00 Hrs. on 09.09.2020
6.	Date and time of opening of Financial bid	To be intimated after technical evaluation of bids by the Tender Committee
7.	Bid Validity period	120 days
8.	Project Cost	Rs. 12,61,61,154/- (Rupees Twelve Crore Sixty- One Lakh Sixty-One Thousand One Hundred Fifty-Four) only
9.	Cost of Bid Document / RFP Fee	Rs 10,000/- (Rupees Ten Thousand] only (Non-Refundable) In the form of Demand Draft in favour of Managing Director, Patna Smart City Ltd, payable at Patna.
10.	e-proc bid processing cost	Rs 17,700/- (Rupees Seventeen Thousand Seven Hundred] only (Non-Refundable) in only online payment mode to BELTRON.
11.	EMD	Rs 22,62,000/- (Rupees Twenty-Two Lakh Sixty-Two Thousand) only (Refundable) in the form of unconditional Bank Guarantee, DD of Scheduled Bank; Post Office Term Deposit/FD/NSC to be pledged in favour of Managing Director, Patna Smart City Ltd, payable at Patna.
12.	Project Duration	7 months and thereafter comprehensive Operation & Maintenance of 5 years (including Defect Liability period of one year)

ज्ञापांक:- 2636 /पटना स्मार्ट सिटी लिमिटेड, पटना, दिनांक- 10/08/2020 ईo.

ई—निविदा के नियम, शर्ते, अर्हता, विशिष्टियाँ एवं ई—टेंडरिंग से संबंधित विशेष जानकारी के लिए वेबसाईट http://www.eproc.bihar.gov.in पर देखा जा सकता है।

Note:- वेबसाईट http://www.eproc.bihar.gov.in पर Department Name में Patna Smart City Limited को select करने पर ही ई—निविदा को देखा जा सकता है।

For queries & clarifications, if any, contact 0612-2219180 or send E-mail to patnasmartcity.pscl@gmail.com

Managing Director,
Patna Smart City Limited,
Patna

Date:10.08.2020



#### PATNA SMART CITY LIMITED



ज्ञापांक:-

/पटना स्मार्ट सिटी लिमिटेड, पटना, दिनांक- 10/08/2020 ई0.

प्रतिलिपि:— निदेशक, सूचना एवं जन—संपर्क विभाग को राज्य स्तरीय हिन्दी के तीन सामाचार पत्रों हिन्दुस्तान, दैनिक जागरण एवं दैनिक भास्कर, अंग्रेजी के टाइम्स ऑफ इंडिया तथा राष्ट्रीय स्तर के एक हिन्दी एवं एक अंग्रेजी समाचार पत्रों में प्रकाशित करने हेतु समर्पित।

Managing Director,
Patna Smart City Limited,
Patna

Date:10.08.2020

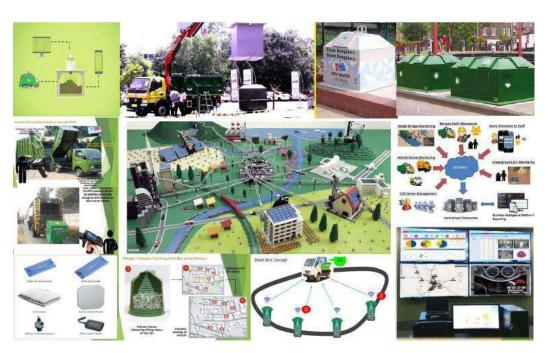




# Smart City Patna ''बेहतर हो पहचान अपना,विकसित राजधानी सन्दर पटना''

# Request or Proposal for "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System in Patna Municipal Area" under Smart City Mission

NIT No: 01/MD/PSCL/2020 Date: 10.08.2020



PATNA SMART CITY LIMITED 5<sup>th</sup> Floor, Biscomaun Tower, Patna, Bihar – 800001





#### **DISCLAIMER**

The information contained in this **Request for Proposal [RFP]** document by Patna Smart City Limited (henceforth referred to as "PSCL" in this document) is provided to bidders on the terms and conditions set out in this RFP document together with any other terms and conditions subject to which such information is provided, for the sole purpose of selection of System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System in Patna Municipal Area under Smart City Mission.

This RFP is not an agreement and is not an offer or invitation to any bidder. The purpose of this RFP is to provide the bidders or any other person, with information to assist in formulation of their technical and financial offers (Bid) to be submitted to PSCL in response to the request for RFP. This RFP includes statements, which reflect assumptions and assessments arrived at by PSCL in relation to the scope of work. The assumptions, assessments, statements and information contained in the Bid documents, may not be taken as complete, accurate, adequate or correct and the bidders are advised to conduct their own analysis or seek its own professional advice before submitting their bids.

Information provided in this Tender Document to the bidders is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. PSCL accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein. Also that PSCL make no representation or warranty and shall incur no liability to any person, including the bidder under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in the Selection Process. PSCL shall accept no liability of any nature whatsoever resulting from negligence or otherwise howsoever caused arising from reliance of any bidder upon the statements contained in this RFP. PSCL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

The issue of this RFP document does not imply that PSCL is bound to select a bidder or to appoint the Selected Bidder (as defined hereinafter) for implementation and reserves the right to reject all or any of the bidder or Bid without assigning any reason whatsoever.

The bidder shall bear all costs associated with or relating to the preparation and submission of the Bid, including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations, which may be required by the bidder. All such costs and expenses will remain with the bidder and PSCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation for submission of the Bid, regardless of the conduct or outcome of the selection process.

Sd/Managing Director
Patna Smart City Limited (PSCL)





## **VOLUME I**





#### **REQUEST FOR PROPOSAL**

Patna Smart City Limited invites online bids [RFP] for selection of "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System for Patna Municipal Corporation Area". The detailed schedule for the bid is given below:-

Sl.	Activity	Timeline		
No.				
1.	Online <b>Sale/Download</b> period of RFP/Tender documents  From 18.08.2020 to 07.09.2020 https://eproc.bihar.gov.in/			
2.	Last date and time for submission of bids online	Till 15.00 Hrs. on 08.09.2020		
3.	Date & time of <b>pre-bid meeting</b> at PSCL office on 5 <sup>th</sup> Floor, Biscomaun Tower, Patna 800001	At 15.00 Hrs. on 25.08.2020		
4.	Last date and time for submission of original EMD & DD (RFP fee)	Till 16.00 Hrs. on 08.09.2020		
5.	Date and time of opening of Technical bid	At 11.00 Hrs. on 09.09.2020		
6.	Date and time of opening of Financial bid	To be intimated after technical evaluation of bids by the Tender Committee		
7.	Bid Validity period	120 days		
8.	Project Cost	Rs. 12,61,61,154/- (Rupees Twelve Crore Sixty-One Lakh Sixty-One Thousand One Hundred Fifty-Four) only		
9.	Cost of Bid Document / RFP Fee	Rs 10,000/- (Rupees Ten Thousand] only (Non-Refundable) In the form of Demand Draft in favour of Managing Director, Patna Smart City Ltd, payable at Patna.		
10.	e-proc bid processing cost	Rs 17,700/- (Rupees Seventeen Thousand Seven Hundred] only (Non-Refundable) in only online payment mode to BELTRON.		
11.	EMD	Rs 22,62,000/- (Rupees Twenty-Two Lakh Sixty-Two Thousand) only (Refundable) in the form of unconditional Bank Guarantee, DD of Scheduled Bank; Post Office Term Deposit/FD/NSC to be pledged in favour of Managing Director, Patna Smart City Ltd, payable at Patna.		
12.	Project Duration	7 months and thereafter comprehensive Operation & Maintenance of 5 years (including Defect Liability period of one year)		

The RFP document shall be available onhttps://www.eproc.bihar.gov.in/and http://smartpatna.co.in/home.aspx. For queries & clarifications, e-mail shall besend to: patnasmartcity.pscl@gmail.com,pscl-bih@gov.in. The Phone no. of PSCL is 0612-2219180





#### Patna Smart City Limited (PSCL)

#### **Table of Contents**

SECTI	ON I: INSTRUCTIONS TO BIDDERS (ITB)	8
1. INT	RODUCTION	8
2. INS	TRUCTIONS FOR ONLINE BID SUBMISSION	8
3. SCC	OPE OF PROJECT	10
4. REQ	QUEST FOR PROPOSALS	11
5. QU	ALIFICATION OF THE BIDDER	11
6. DUI	E DILIGENCE BY APPLICANTS	12
7. SAL	LE OF RFP DOCUMENT	12
8. VAI	LIDITY OF THE BID	12
9. BRI	EF DESCRIPTION OF THE SELECTION PROCESS	12
10. SC	HEDULE	13
11. PR	E – PROPOSAL SITE VISIT AND DATA INSPECTION	13
12. PR	E-BID MEETING	13
13. CO	NTACT DETAILS	14
14. CO	NFLICT OF INTEREST	14
	JMBER OF PROPOSALS	
16. CO	ST OF PROPOSAL	14
17. SIT	TE VISIT AND VERIFICATION OF INFORMATION	15
18. AC	KNOWLEDGEMENT BY APPLICANT	15
19. RIC	GHT TO REJECT ANY OR ALL PROPOSALS	15
20. CL	ARIFICATIONS BY WAY OF PRE-BID MEETING	16
21. AM	MENDMENT OF RFP	16
22. PR	EPARATION AND SUBMISSION OF PROPOSAL	16
23. PE	RFORMANCE SECURITY	22
24. RE	TENTION MONEY	22
25. EX	TENSION OF PERFORMANCE SECURITY AND RELATED MATTERS	23
26. TE	CHNICAL BID FORMAT	23
27. EV	ALUATION PROCESS	24
27.1	Technical Evaluation of Proposals	24
27.2	Technical Marking Matrix	25
27.3	Financial Evaluation of Proposal	28
28. CO	ONFIDENTIALITY	28
29. CL	ARIFICATIONS	29
30. AP	POINTMENT OF AGENCY	29



## System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System in Patna Municipal Area under Smart City Mission



30.1 Negotiations:	29
30.2 Indemnity:	29
30.3 Award of Work:	29
30.4 Execution of Agreement:	29
30.5 Commencement of Assignment:	30
30.6 Proprietary Data:	30
31. FRAUD AND CORRUPT PRACTICES	30
32. PRE-BID MEETING	31
33. PROJECT COMPLETION & LIQUIDATED DAMAGES	32
34. BIDDERS FROM COUNTRY WHICH SHARES LAND BORDER WITH INDIA	32
35. MISCELLANEOUS	32
SECTION II: QUALIFICATION OF THE BIDDER	34
SECTION III: CONDITION OF CONTRACT	36
SECTION IV: SPECIAL CONDITION OF CONTRACT	45
1. SCOPE OF WORK	45
2. DELIVERABLES & TIMELINE	49
3. PAYMENT SCHEDULE	50
4. DOCUMENTATION	51
5. SCALABILITY	51
6. DATA PRIVACY	51
7. SCOPE OF TRAINING	51
8. SCOPE OF ACCEPTANCE TESTING	52
9. OPERATION & MAINTENANCE SUPPORT	52
10. MANAGED SERVICES	52
11. MANPOWER	52
12. MOBILIZATION ADVANCE	53
13. DEFECT LIABILITY PERIOD (DLP)	53
14. OPERATION & MAINTENANCE PERIOD (O&M)	54
15. SERVICE LEVEL AGREEMENT (SLA)	54
16. PRICING	56
17. RISK MANAGEMENT	56
18. PUBLICITY	56
19. INSURANCE	56
20. ASSIGNMENT, SUBLETTING AND OUTSOURCING	57
21. USER LICENSE AND PATENT RIGHTS	
22. INDEMNITY	57
23. FORCE MAJEURE	58



## System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System in Patna Municipal Area under Smart City Mission



24. LEGAL MATTER	58
25. DEFECT LIABILITY PERIOD (DLP)	59
26. RIGHT TO VARY QUANTITY	60
27. TERMINATION:	60
28. PAYMENT UPON TERMINATION	61
29. ARBITRATION POST SIGNING OF CONTRACT	62
SECTION V: FUNCTIONAL & TECHNICAL SPECIFICATION	65
SECTION VI : BILL OF QUANTITIES (BOQ)	84
SECTION VII: FORMS & ANNEXURES	89





#### **SECTION I: INSTRUCTIONS TO BIDDERS (ITB)**

#### 1. INTRODUCTION

Patna Smart City Limited (PSCL) is a Special Purpose Vehicle (SPV) created by Government of Bihar and Patna Municipal Corporation under Smart City Mission to deliver several Area Based Development (ABD) and PAN City initiatives, with focus on infrastructure and Information & Communication Technology (ICT) advancements at strategic locations.

The Ministry of Housing and Urban Affairs (MoHUA), Government of India (GoI) has initiated the Smart City Mission (SCM), under which 100 selected cities are to be developed as **smart cities** in India. Patna is one such city, selected in the third round. Under the Smart City Mission, Government has emphasized to improve the basic civic amenities of the cities on one hand and provide modern technological advances for ease of living on the other. The Smart City Proposal for Patna envisions to implement a number of projects including Intelligent Solid Waste Management as a PAN City project.

#### 2. INSTRUCTIONS FOR ONLINE BID SUBMISSION

- (i) The RFP document containing the project profile, qualification criteria and process to be followed for evaluation may be downloaded from the website: <a href="https://www.eproc.bihar.gov.in">www.eproc.bihar.gov.in</a>
- (ii) For support related to e-tendering process, bidders can contact e-Procurement HELP DESK, First Floor, Plot No.- M/22, Road No.-25, Sri Krishna Nagar, Bank of India Compound, Patna-800001 [Contact No: 0612-2523006; 7542028164].
- (iii) In case of any delay, due to any reason whatsoever, in receipt of Bid Documents send by the bidders, PSCL will not be held responsible.
- (iv) The owner reserves the right to reject any or all bid(s) or cancel/withdraw the RFP without assigning any reason whatsoever and in such case, no bidder/ intending bidder shall have any claim arising out of such action of the owner.
- (v) For participating in e-tendering process, the contractor shall have to get themselves registered and obtain User ID, Password and digital signature. This will enable them to access the website www.eproc.bihar.gov.in and download RFP/participate in e-tender. Those who are not registeredmay get themselves registered contacting e-Procurement HELP DESK for registration.
- (vi) PSCL, Patna intends to follow a competitive biddingprocess, in order to shortlist suitable bidders, who are found technically eligible after evaluation so that their price bids can be opened and evaluated for award of the project work.





- (vii) The summary of the scope of work and the detail of the bidding process for the project is included in this RFP document.
- (viii) Any clarifications may be sought online through the e-proc site, providing the contact details or during queries made till and during the pre-bid meeting. Bidders should take into account all corrigenda, published till the time of submition of bids online.
- (ix) In the unlikely event of server for *www.eproc.bihar.gov.in* being down for more than two consecutive hours (in the period from midnight to closing time for receipt of bids) on the last date of submission, the last date of the bid submission may be extended to the next working day, till the time stipulated in the original RFP.
- (x) At the time of submission, the bidders are requested to check thesize of the document to be uploaded and ensure that work file gets uploaded. If they are unable to upload the complete file in the first instant, they should click on cancel & update the same.
- (xi) Before submission, the bidders should satisfy themselves of download ability/visibility of the scanned document/uploaded file.
- (xii) The bidders must use MS Office-2003 version. Also, the file size should be less than 5 MB and be in M.S. Word, M.S. Excel, PDF and JPEG format.
- (xiii) No claim shall be entertained on account of disruption of internet service being used by the bidders. Bidders are therefore advised to upload their bids well in advance to avoid last hour's technical snag(s).
- (xiv) In exceptional circumstances, PSCL may solicit the bidder's consent to an extend the period of validity of bids.
- (xv) Bids that are rejected during the bid opening process shall not be considered for further evaluation, irrespective of the circumstances.
- (xvi) The bidders shall submit their Technical bid including eligibility and qualification certificates/details, etc., Financial bid, in the standard online formats provided in the RFP in e-Procurement website (www.eproc.bihar.gov.in). The bidders are required to scan copies of all the relevant certificates, documents etc. and upload the same in the e-Procurement websitein support of eligibility criteria, etc. The bidder shall sign on the uploaded supporting statements, documents, certificates, owning the responsibility for their correctness/authenticity.
- (xvii) Corrigendum/Addendum, if any, will be published on the website itself and these are supposed to be seen by the bidders before submission of bids.
- (xviii)The bid needs to be submitted online. Bidder need to submit Cost of Bidding Document/RFP Fee and EMD before the stipulated date. The bidder, if desire, may submit a hard copy of the Technical bid, which is optional. However, the Financial bid should be submitted only online and no hard copy of Financial bid may be submitted in any case. Financial bid if submitted in hard copy shall make the bid non-responsive and eligible for rejection. Scanned copy





## of all the financial instruments shall also be uploaded as part of the offer/bid.

- (xix) The bidder has to select offline payment option to make payment towards the Tender Fee/ EMD as applicable and enter details of the financial instrument(s).
- (xx) The details of the Demand Draft of scheduled bank or any other acceptable instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission, otherwise submitted bid will not be acceptable or will be liable for rejection.
- (xxi) A bid processing fee of Rs.17,700/- (Non-Refundable) needs to be paid only through e-Payment modes i.e. Internet Payment Gateway (Master or Visa Card) /Internet Banking/NEFT or RTGS towards charges for online processing charges of BELTRON.
- (xxii) For any queries regarding Tendering process, the bidders may contact at Patna Smart City Limited at the address, provided in the tender document.

#### 3. SCOPE OF PROJECT

The scope of work include, but not limited to, installation of QR codes on households in the Patna Municipal area as per the locations provided, providing handheld QR code readers and smart phones (as detailed in BOQ), geo-fencing of the project area and geo-tagging of households (utilizing, available GIS maps); installation and commissioning of Vehicle Tracking System (VTS) for real time tracking of about 1,125 vehicles (consisting of Open Tipper, Closed Tipper, e-Cart, Hywa, Robat Bobcart, etc) inside the Municipal area and many a times going upto landfill site (via transfer stations) at Ramchak-Bairia, [6 km from Zero mile Patna on Patna-Gaya Road], to allow better inventory maintenance, so that wastage of trips of the vehicles is reduced to the extent practicable; Bio-metric Attendance System with face recognition facility too; providing a platform/system with event generation with capabilities to notify the supervisors, zonal officers and the Municipal Commissioner through Mobile App, during Municipal Solid Waste operations viz. door to door collection, garbage cleaning from secondary points (like transfer stations); provide a Greivance Redressal System (GRS); providing, installing and commissioning Weigh Bridge (including Boom barrier of size provided in BOQ) together with constructing a suitable Control Room and providing & installing PTZ cameras at landfill site at Ramchak-Bairiya. The proposed system shall help the Patna Municipal Corporation to track and monitor the various activities of Municipal Solid Waste operations using IT hardware and system softwatre mentioned above. The application should make possible viewing of the historical data obtained from all activities viz. BOA, VTS, GRS, etc.; provide qualified and trained personnel (as detailed in RFP) viz. one Project Coordinator, one SWM Expert, ten Support Engineers and six Call Centre Executives for carrying out O&M for 5 years.





#### 4. REQUEST FOR PROPOSALS

The purpose of this RFP is to seek the services of reputed system integrator, which shall carry out Design, Development, Implementation of Intelligent Solid Waste Management System and thereafter carry out Operation & Maintenance for five years in the Patna Municipal Corporation Area. This RFP document provides information to enable the bidders to understand the broad requirements for submission of their bids, however, bidders are expected to conduct their due diligence to broaden their understanding before bidding. PSCL intends to select the Agency/System Integrator through an open fair competitive Low Cost Selection process amidst bidders who secure minimum qualifying marks of 70 (during technical evaluation), in accordance with the procedure set out herein.

#### 5. QUALIFICATION OF THE BIDDER

- (i) The Bidder(s) shall be a firm or company registered/incorporated in India under the (Indian) Companies Act 1956/2013 and should be in the IT/SWM business and have been operational at least for 3 (three) years as on date of bid submission.
- (ii) The bidder eligible for participation in the tender shall be single business entity/ sole bidder. **No consortium or JV is allowed to bid for this project.**
- (iii) The bidder shall have a annual turnover of at least 50% of estimated cost of works (for which the RFP has been invited) from IT/SWM business during any one the last 3 financial years 2016-17, 2017-18 & 2018-19. The turnover will be indexed @ 8% for a year.
- (iv) Bidder should have experience of completing at least 2 (two) software solution based project (Software/Data Centre/ Disaster recovery/ Cloud services/ Intelligent SWMS or the like) as a prime Agency/Contractor **in any Government organisation/ ULB** starting 2016-17 with minimum value of 50% of estimated value of contract. Sub-contractor's experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria.
- (v) The bidder should have a **Positive Net Worth** for last 3 financial years viz. 2016-17 2017-18 and 2018-19.
- (vi) The bidder must have a valid GST registration in India and PAN
- (vii) The Bidder should possess **any one** of the following certification valid at the time of bidding:
  - ISO 9001
  - ISO 27001
  - ISO 20000
- (viii) As on date of submission of bid, the bidder should **not be blacklisted/debarred/terminated** by any Central/ State Government Organization/Department/PSU in India.
- (ix) The Bidder should have or shall undertake to set up a office in Patna during execution of this project.
- (x) The Bidder should have at least **50 IT/SWA professional staff on its own pay roll** for providing IT/SWA related services.





#### 6. DUE DILIGENCE BY APPLICANTS

Bidders are encouraged to keep themselves fully informed about the scope of work and associated works required to be carried out as a system integrator together with the five years 0&M works. They should make their own assessment of the local conditions before submitting the bid, which can be accompalised by making a visit to the project area, collecting information by sending queries to PSCL, attending the Pre-Bid meeting on the date and time specified in RFP; or combination of more than one such activities, as deemed fit by the prospective bidder.

#### 7. SALE OF RFP DOCUMENT

The RFP document can be downloaded by the bidder from the e-procwebsite of <a href="https://eproc.bihar.gov.in/">https://eproc.bihar.gov.in/</a>. The RFP Fee of Rs. 10,000/- (Rupees Ten Thousand) only shall have be paid by the bidder in the form of Demand Draft in favour of Managing Director, Patna Smart City Ltd, payable at Patna, which shall be non-refundable. Without payment of RFP fee the bids shall be taken as incomplete and non-responsive and shall not be considered further. For request for bid, an online payment towards e-proc bid processing fee, has to be made to BELTRON.

#### 8. VALIDITY OF THE BID

The Bid shall be valid for a period of not less than 120 days from the Proposal Due Date (**PDD**) or the last date of submission of bid, notified in the very first call.

#### 9. BRIEF DESCRIPTION OF THE SELECTION PROCESS

- (i) The bidder will be selected adopting a **two stage selection process** after evaluating the bids, comprising of technical and financial bids, submitted by the bidders. Both the technical proposal/bid and the financial bid shall be submitted in soft copy online through e-procurement portal.
- (ii) The selection will be done through LCS (Least Cost Selection) method, but only those technical bids will be considered in which bidders secure minimum qualifying marks of 70 during technical evaluation.
- (iii) In the first stage, a technical evaluation will be carried out as per marking matrix specified in this RFP. Bidders will be evaluated and allotted marks as per the marking matrix. Short-listed bidders shall consist of those bidders who score qualifying marks (70 marks or more).
- (iv) In the second stage the financial bid of technically qualified bidders, i.e. those who obtain 70 marks or above; will be opened and a financial evaluation will be carried out. The quoted rates will be taken as to include all taxes and applicable GST. The taxes and GST shall not be mentioned separetaly. No add-





ons of taxes etc. will be permitted. Proposals will finally be ranked according to total bid cost, inclusive of all taxes and GST (not giving any weightaige whatsoever to technical evaluation marks). The lowest price bid will be declared L1. Thereafter the bidders will be called L2, L3 etc. depending on their quote, as the case may be. In case of tie the rules for selection of successful bidder as applicable in Government of Bihar tenders will be applicable.

(v) As this is an **Item Rate Contract** in which all the **software related items are in turnkey mode**, the selection will be based upon **total bid cost** and the technically responsive bidder (obtaining 70 and above marks in technical evaluation) whose quote is the lowest will be awarded the work. The prospective bidders are therefore required to quote for each and every item/service/component/ software system provided in the BOQ, as the bid of those bidders who quote partially i.e. leave some items unquoted, will be rejected, without further communication.

#### 10. SCHEDULE

The following schedule in respect of various activities is to be followed:

Sl. No.	Activity	Timeline		
1	Online Sale/Download period of RFP/Tender documents	From 14.08.2020 to 07.09.2020 (15.00 Hrs)		
2	Date & time of pre-bid meeting	At 15.00 Hrs. on 25.08.2020		
3	Last date and time for submission of bids	Till 15.00 Hrs on 08.09.2020 at PSCL office on 5th Floor, Biscomaun Tower, Patna 800001		
4	Date and time of opening of Technical bids	At 11.00 Hrs. on 09.09.2020		
5	Date and time of opening of Financial bids	After completing Technical Evaluation of bids		

#### 11. PRE - PROPOSAL SITE VISIT AND DATA INSPECTION

Prospective bidders may visit Patna Smart City Limited office and review the available data at any time prior to submission of bids. For this purpose, they will make request at least a day in advance.

#### 12. PRE-BID MEETING

The date, time and venue of Pre-bid meeting is given in Para 9: Schedule.





#### 13. CONTACT DETAILS

All communications in respect to this RFP, including the submission of Proposal, shall be addressed to:

#### Managing Director,

Patna Smart City Limited.

Address: 5th Floor, Biscomaun Tower, Patna, Bihar.

e-mail: patnasmartcity.pscl@gmail.com, pscl-bih@gov.in

The **Website** for submission of online bid is: https://eproc.bihar.gov.in/

All envelopes, should contain on its top the following in bold letters:

NIT No. 01/MD/PSCL/2020 regarding "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System for Patna Municipal Corporation Area"

#### 14. CONFLICT OF INTEREST

- (i) A bidder shall not have a conflict of interest that may affect the Selection Process or the Work (**Conflict of Interest**). Any bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the Authority shall forfeit and appropriate the Bid Security.
- (ii) The Authority requires that the Agency/bidder provides professional, objective, and impartial solution and at all times hold the Authority's interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The Agency/bidder shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of the Authority.

#### 15. NUMBER OF PROPOSALS

No Applicant shall submit more than one bid for the said work.

#### 16. COST OF PROPOSAL

The bidders shall be responsible for all of the costs associated with the preparation of their Proposals/bids and their participation in the Selection Process including negotiation, if any, visits to be made to the Authority/Project site etc. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Selection Process.





#### 17. SITE VISIT AND VERIFICATION OF INFORMATION

Bidders are encouraged to submit their respective proposals/bids after visiting the project area (for which Patna Smart City Limited can be contacted) and collection of data/information required, if any. Request for site visit can be made with PSCL at least one day in advance.

#### 18. ACKNOWLEDGEMENT BY APPLICANT

- (i) It shall be deemed that by submitting the Proposal, the bidder has:
  - a. made a complete and careful examination of the RFP;
  - b. received all relevant information requested from the Authority;
  - c. acknowledge and accepts the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of the Authority or relating to any of the matters referred to in this RFP.
  - d. satisfied itself about all necessary and required matters, for submitting an informed Application/bid and performance of all of its obligations there under which form part of the bid;
  - e. acknowledge that it does not have any Conflict of Interest; and
  - f. agree to be bound by the undertaking provided by it under and in terms hereof.
- (ii) The Authority shall not be liable for any omission, mistake or error on the part of the bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RFP or the Selection Process, including any error or mistake therein or in any information or data given by the Authority.

#### 19. RIGHT TO REJECT ANY OR ALL PROPOSALS

- (i) Notwithstanding anything contained in this RFP, the Authority reserves the right to accept or reject any Proposal and to annul the Selection Process and reject all proposals, at any time (before entering into an agreement) without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.
- (ii) Without prejudice to the generality of above, the Authority reserves the right to reject any Proposal if:
  - a) at any time, a material misrepresentation is made or discovered, or
  - b) the bidder does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Proposal.
- (iii) Misrepresentation/ improper response by the Applicant may lead to the disqualification of the Applicant. If such disqualification/ rejection occurs after the Proposals have been opened and the L1 ranking bidder gets disqualified/





rejected, then the Authority reserves the right to consider the next best bidder, or take any other measure as may be deemed fit in the sole discretion of the Authority, including annulment of the Selection Process.

#### 20. CLARIFICATIONS BY WAY OF PRE-BID MEETING

(i) Bidders requiring any clarification on the RFP may send their queries to the Authority in writing by e-mail so as to reach before the pre-bid meeting date mentioned in the Schedule at Para 9. The subject shall clearly bear the following identification:

"Pre-bid queries in respect to NIT No 01/MD/PSCL/2020: "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System for Patna Municipal Corporation Area"

- (ii) The Authority shall endeavor to respond to the extent practicable to queries at the time of pre-bid meeting and posting the reply to all such queries on the official e-procurement website (https://eproc.bihar.gov.in/).
- (iii) The Authority reserves the right not to respond to any query or provide any clarification(s), in its sole discretion, and nothing shall be construed as obliging the Authority to respond to any question or to provide any clarification and under such conditions, the provision under RFP shall prevail.

#### 21. AMENDMENT OF RFP

- (i) At any time prior to the deadline for submission of Proposal, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by an bidder, modify the RFP document by the issuance of Addendum/ Corrigendum / Amendment and posting it on the Official Website.
- (ii) All such amendments/corrigendum/addendums will be posted on the Official Website and will be binding on all bidders.
- (iii) In order to afford the bidders a reasonable time for taking an amendment into account, or for any other reason, the Authority may, in its sole discretion, extend the last date of submission of bid.

#### 22. PREPARATION AND SUBMISSION OF PROPOSAL

(i) Language: The Proposal and all accompanying documents and communications in relation to or concerning the Selection Process shall be in English; strictly on the forms provided in this RFP. No supporting document or printed literature shall be submitted with the Proposal unless specifically asked for. In case any of these documents is in another language, it shall be accompanied by an accurate translation of the relevant passages in English.





#### (ii) Format and signing of Proposal

- a) The bidders shall provide all information sought under this RFP. The Authority would evaluate only those proposals that are received in the specified format and is complete in all respects. The technical proposal shall be submitted online and a hard copy of the same shall be provided. However, the financial proposal shall be submitted only online.
- b) The bidder shall prepare one original set of the Proposal (together with originals/ copies of documents required to be submitted along therewith pursuant to this RFP). In the event of any discrepancy between the online submitted and physically submitted versions, the online submission shall prevail.
- c) The Proposal shall be typed or written in indelible ink and signed by the authorised signatory of the bidder who shall initial each page. In case of printed and published documents each page shall be initialed. All the alterations, omissions, additions, or any other amendments made to the Proposal shall be initialed by the person(s) signing the Proposal. The Proposals must be properly signed by the Authorised Representative as detailed below:
  - by a partner, in case of a partnership firm and/or a limited liability partnership; or
  - by a duly authorized person holding the Power of Attorney, in case of a Limited Company or a corporation; or

## A copy of the Power of Attorney certified by a Notary Public in the form specified in Appendix given in this RFP shall accompany the Proposal.

- d) Bidders should note the last date and time of bid submission, as specified in this RFP, for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Authority, and that evaluation will be carried out only on the basis of documents submitted online by the last date and time of submission of bid. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the last date and time of submission, and unsolicited material, if submitted, will be summarily rejected.
- e) An authorized representative (or representatives) of the Bidder shall initial all pages of the Technical and Financial Bids. Bid should be accompanied by anauthorization in the name of the signatory (or signatories) of the Bid. The authorization shall be in the form of a written Power of Attorney accompanying the Bid or in any other form demonstrating that the representative has been duly authorized to sign.





#### (iii) Technical Proposal

- a) Bidders shall submit the digitally signed technical proposal online at http://https://eproc.bihar.gov.in/ in the formats at Appendix (the Technical Proposal) and shall also submit the proposal in physical form at PSCL address on or before the date and time mentioned in this RFP.
- b) Approach & Methodology: Technical bid shall consist of (a) Approach & Methodology specific to the project Project and (b) Risks identification and Mitigation plan as detailed in the following paras (considered for qualifying marks during technical evaluation):
  - Overall approach and methodology of the bidder to implement and maintain the Intelligent Solid Waste Management System, which should include detailed understanding of the scope of the work/ project requirement, technical solution, approach & methodology which are specific to the project, Resource Management Plan and detailed Project Plan with interim milestone & timelines. The comprehensive plan, proposed solution, detailed project schedule, team structure, manpower positioning, implementation methodology, training details, management of the project, list of technology providers etc. together with an undertaking from bidders that the proposed system shall be installed, commissioned, implemented by them, if the contract is awarded, complete in all respects adhering to the requirements of RFP.
  - Project Risks Identification and Mitigation Plan related to MSW Operations, Digital Weighbridge Commissioning, Software and Hardware deployment, Integration with external systems and Operation & Maintenance.
- c) While submitting the Technical Proposal, the bidder shall, in particular, ensure that:
  - The Bid Security is submitted as per the provisions laid down in this RFP.
  - All forms are submitted in the prescribed formats and signed by the prescribed signatories; Power of Attorney, if applicable, is executed as per Applicable Laws;

#### Failure to comply with the requirements spelt out in this above shall make the Proposal liable to be rejected.

- d) The Authority reserves the right to verify all statements, information and documents, submitted by the bidder in response to the RFP. Any such verification or the lack of such verification by the Authority shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority hereunder.
- e) In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the bidder





or the bidder has made material misrepresentation or has given any materially incorrect or false information, the bidder shall be disqualified forthwith, if not yet appointed as the Agency, either by issue of the LOA or entering into of the Agreement; and if the Selected bidder has already been issued the LOA or has entered into the Agreement as the case may be; the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by the Authority without the Authority being liable in any manner whatsoever to the Selected bidder or Agency, as the case may be. In such an event, the Authority shall forfeit and appropriate the Performance Security.

#### (iv) Financial Proposal

- a) The Financial Proposal shall be submitted online only and in the formats at Appendix-II (Financial Proposal) clearly indicating the total cost of the work, in Indian Rupees, and signed by the bidder's Authorised Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- b) While submitting the Financial Proposal, the bidder shall ensure the following:
  - All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover overall cost for supply and services to PSCL as per scope given in this RFP.
  - The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
  - The Financial Proposal shall take into account all expenses. However, while quoting the CAPEX and OPEX (including manpower) care should be taken to ensure that in no case the OPEX cost should is less than 40% of the total cost of the project and the year to year variation of OPEX (including manpower) is not more than 15%. If the aforementioned OPEX (including manpower) is less than 40% or variation in any 2 years is more than 15%, the bid shall be rejected with no opportunity for redressal and no request in this regard shall ever be entertained. For the avoidance of doubt, it is clarified that all taxes (GST) shall be deemed to be a part of quoted rate shown under the Financial Proposal.
  - Costs shall be expressed in INR only and the price bid should be submitted only online.





#### (v) Submission of Proposal

- a) The bidders shall submit the Technical Proposal online as per date and time mentioned in this RFP. Submission of Technical Proposal in physical form is optional (which will not be considered for evaluation). However, the Financial Proposal shall be submitted online only as mentioned. The bidders may, if wish, submit the Technical Proposal in hardbound or spiral bound form with all pages numbered serially and by giving an index of submissions. Each page of the submission shall be initialed by the Authorised Representative of the bidder as per the terms of this RFP.
- b) The Technical Proposal and Financial Proposal shall be typed/entered in ink and signed by the Authorised Representative of the bidder. All pages of the original Technical Proposal and Financial Proposal must be numbered and initialed by the person or persons or Authorised Signatory, signing the Proposal.
- c) The completed Proposal must be submitted online on or before the specified time. Proposals submitted by fax, telex, telegram or e-mail shall not be entertained. Scanned copy of the original Technical Proposal shall be uploaded on the <a href="http://https://eproc.bihar.gov.in/">http://eproc.bihar.gov.in/</a> duly digitally signed. Bidder may submit a physical copy of Technical bid if they want to, but in all cases before the due date of submission of cost of BOQ as DD and bid security/EMD. However, in all cases the uploaded version of the bid (on e-proc and not the physical copy) will be considered for evaluation. The Financial Proposal shall be submitted online only.
- d) The Proposal shall be made in the Forms specified in this RFP. Any attachment to such Forms must be provided on separate sheets of paper and only information that is directly relevant should be provided. This may include photocopies of the relevant pages of printed documents. No separate documents like printed annual statements, firm profiles, copy of contracts etc. will be entertained.
- e) The rates quoted shall be firm throughout the period of performance of the assignment up to and including discharge of all obligations of the Agency under the Agreement.
- f) The price should be filled in both, figure and word, failing which the bid will be summarily rejected, even being L1.

#### (vi) Proposal Due Date (PDD) or Last Date of Bid Submission

a) Proposal should be submitted on or before the Proposal Due Date as specified in bid schedule, at the PSCL address provided in the RFP, in the manner and form, as detailed in this RFP. A receipt thereof should be obtained from the person specified therein.





b) The Authority may, in its sole discretion, extend the PDD by issuing an Addendum/Corrigendum to be uploaded on the website.

#### (vii) Late Proposals

Proposals received by the Authority after the specified time on Proposal Due Date shall not be considered eligible and shall be summarily rejected.

#### (viii) Earnest Money Deposit (Bid Security)

- a) The bidder shall furnish as part of its Proposal, a bid security or Earnest Money Deposit (EMD) of Rs 22,62,000/- (Rupees Twenty Two Lakh Sixty TwoThousand) only (Refundable) in the form of unconditional Bank Guarantee, DD of Scheduled Bank; Post Office Term Deposit/ FD/NSC to be pledged in favour of Managing Director, Patna Smart City Ltd, payable at Patna. The original copy of unconditional BG in form of DD of Scheduled Bank; Post Office Term Deposit/ FD/NSC should be submitted by the bidder. The bid will considered non-responsive if bid security/EMD is not submitted in original.
- b) In the event that the first ranked bidder commences the assignment as required, the Authority shall returned the Bid Security of all other bidders promptly. The Selected bidder's Bid Security shall be returned, upon the said bidder signing the Agreement and submitting Performance Bank Guarantee.
- c) Any Bid not accompanied by the Bid Security shall be rejected by the Authority as non-responsive.
- d) The Authority shall not be liable to pay any interest on the Bid Security and the same shall be interest free.
- e) The bidder, by submitting its bid pursuant to this RFP, shall be deemed to have acknowledged that without prejudice to the Authority's any other right or remedy hereunder or in law or otherwise, the Bid Security shall be forfeited and appropriated by the Authority as the mutually agreed preestimated compensation and damage payable to the Authority for, *inter alia*, the time, cost and effort of the Authority in regard to the RFP including the consideration and evaluation of the Proposal under the following conditions:
  - If the bidder engages in any of the Prohibited Practices;
  - If the bidder withdraws its Proposal during the period of its validity as specified in this RFP and as extended by the bidder from time to time;
  - In the case of the selected bidder fails to reconfirm its commitments after its selection;
  - In the case of a selected bidder fails to sign the Agreement or commence the assignment as specified in this RFP; or
  - If the bidder is found to have a Conflict of Interest as specified in the RFP.







Following are the details to prepare Bid Security in the form of BG/DD;

a) Beneficiary's Account Name
 b) Beneficiary's Bank Name
 c) Branch Name and Code
 d) Evaluation of the second of the se

d) IFSC Code : PUNB0MBGB06 ("0" is Zero at both places)

#### 23. PERFORMANCE SECURITY

- (i) Within fifteen(15) working days from the date of issue of LOA/LOI, the successful bidder shall at his own expense submit unconditional and irrevocable Performance Bank Guarantee(PBG) to PSCL. The PBG shall be from a Nationalised Bank or a Scheduled Commercial Bank in the format prescribed in the RFP payable on demand, for the due performance and fulfillment of the contract by the Bidder.
- (ii) Performance Bank Guarantee shall be **2% of the awarded CAPEX** value. The Validity of the Performance Bank Security shall be 28 days beyond the Defect Liability of one year and thereafter **10% of the OPEX** value valid till expiry of the O&M period.

#### 24. RETENTION MONEY

- (i) From every running bill (as per the payment schedule) during the CAPEX Implementation Period, PSCL shall deduct 8% (eight percent) of bill value as guarantee/retention money till such time the total Retention/security Money (2% PBG amount plus all guarantee/retention money so deducted) does not become 10% of the CAPEX Amount; for guarantee/retention/security towards performance of the obligations of the Agency during CAPEX Implementation.
- (ii) Upon occurrence of a Contractor's Default, the Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to appropriate the relevant amounts from the Retention Money as Damages for Contractor's Default.
- (iii)On successful completion of the CAPEX work, half of the total Retention Money shall be released to the contractor after one month of completion of CAPEX work and balance half of the total amount of Retention Money will be returned after completion of Defect Liability period of one year, provided that all defects notified by the Project-in-Charge has been rectified by Contractor and Project-in-Charge has issued certificate for the same and also that all dues have been recovered.
- (iv) Within 15 (fifteen) days of the date of issue of Defect Liability period, the Authority shall discharge the performance bank guarantees and the contractor shall furnish another PBG for the OPEX period which shall be 10% of OPEX cost as already mentioned in (ii) above.





## 25. EXTENSION OF PERFORMANCE SECURITY AND RELATED MATTERS

- (i) The Agency may initially provide the Performance Security for a period of 28 days beyond Defect Liability period for CAPEX part; provided that it shall procure the extension of the validity of the PerformanceSecurity, as necessary, at least 1 (one) month prior to the date of expiry thereof. Upon the Agency providing an extended Performance Security, the previous Performance Security shall be deemed to be released and the Authority shall return the same to the Agency within a period of 7 (seven) business days from the date of submission of the extended Performance Security.
- (ii) PBG shall be invoked by PSCL, in the event the Agency:
  - Fails to meet the overall contract condition as mentioned in this RFP or any changes mutually agreed between the parties.
  - Fails to perform the responsibilities and obligations as set out in the RFP to the complete satisfaction of PSCL as per conditions and scope mentioned in the RFP.
  - Misrepresents any facts/information submitted to PSCL.
  - Any corrupt or fraudulent practice adopted by the Agency for award of contract or any such corrupt or fraudulent practice adopted at any stage during execution of the assigne job.
- (iii) In the event of the bidder being unable to carry out the work or provide service as per the contract for whatsoever reason(s), PSCL shall have the right to invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of PSCL under the contract in the matter, the proceeds of the PBG shall be payable to PSCL as compensation for any loss resulting from the bidder's failure to perform/comply its obligations under the contract.
- (iv) PSCL shall notify the Agency in writing of the exercise of its right to receive such compensation within 30 days, indicating the contractual obligation(s) for which the Agency is in default. After 30 days of notice, if the Agency fails to rectify the default, PSCL shall be entitled to make recoveries from the Bidder's bills, PBG, or from any other payment due to him under this contract, an equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

#### 26. TECHNICAL BID FORMAT

Sl.No.	Section Heading	Details	
1.	1. Technical Bid Checklist As per format provided at Annexure 1		
2.	2. Technical Bid Covering Letter As per format provided at Annexure 2		
2	About Bidder( In detail) & EMD	Bidder's General Information and EMD	
3.	details	details as per Annexure 3	
4.	RFP Fee	As indicated at Para 7 of Section 1: ITB	





	T			
5.	E-proc bid processing fee	As indicated at Para 2 (xxi) of Section 1: ITB		
	Incorporation/Registration of	As per Annexure 4		
	Company	115 per filliteaure T		
	Certificate regarding non	Self certification as per Para 5 (ii) of Section		
	consortium/JV	1: ITB		
	Audited turnover statement	As per Annexure 5		
	Positive Net Worth certificate	As per ITB		
	Work Experience from Client	As per Annexure 7		
	GST & PAN	As per ITB		
	ISO Certification	As per ITB		
	Declaration regarding Not	As per Annexure 6		
	Blacklisting	As per Annexure o		
	Equipment details	As per Annexure 8		
	Manufacturers'/Producers'	As per Annexure 10		
	Authorization Form	As per Annexure 10		
	Self declaration regarding	Self Declaration		
	office setup at Patna	Sen Deciaration		
	Certificate regarding 50	As nor ITP		
	IT/SWM personal engagment	As per ITB		
	Power of Attorney Certificate	As per Annexure 14		
	Project Plan	Project plan as per format		
	Approach & Methodology	As now Announce O		
	write up	As per Annexure 9		
	Project Risks Identification and	As non Announce O		
	Mitigation Plan	As per Annexure 9		
	All other documents /	with alarity		
	information	with clarity		

#### 27. EVALUATION PROCESS

#### 27.1 Technical Evaluation of Proposals

- (i) The Authority shall open the Proposals on the due date and time of opening of bid.
- (ii) The **Technical Bid** shall be opened first.
- (iii) **Tender Fees and Bid Security will be verified** before evaluation of the Technical Bid. In case of any of the above mentioned is not present, the Bid will be considered non-responsive and will be rejected.
- (iv) **The** evaluation of the Technical Bid will be done, where **all the documents under the Eligibility criteria are mandatory**. The proposal of the bidder will be rejected if any of the documents fulfilling the criteria is not provided.
- (v) The Technical Proposal shall be considered responsive only if:
  - (a) the Technical Proposal is received in the form specified;





- (b) it is received by the last date and time of submission, including any extension thereof;
- (c) it is accompanied by the Power of Attorney;
- (d) it contains all the information (complete in all respects) as requested in the RFP;
- (e) it does not contain any condition; and
- (f) it is not non-responsive in terms hereof.
- (vi) The Authority reserves the right to reject any Proposal, which is non-responsive, and no request for alteration, modification, substitution or withdrawal shall be entertained by the Authority in respect of such Proposals.
- (vii) The Authority shall subsequently examine and evaluate proposals in accordance with the Selection Process specified in this RFP and the marking criteria set out in this RFP.
- (viii) After the technical evaluation, the Authority shall prepare a list of qualified or technically responsive bidders, who obtain the minimum qualifying marks of 70 (break-up provided in next para), for opening of their Financial Proposals. The Authority will not entertain any query or clarification from bidders who fail to qualify at any stage of the Selection Process. The financial evaluation and final ranking of the Proposals shall be carried out based on the **Least Cost Selection**.
- (ix) Bidders are advised that Selection shall be entirely at the discretion of the Authority. Bidders shall be deemed to have understood and agreed that the Authority shall not be required to provide any explanation or justification in respect of any aspect of the Selection Process or Selection.
- (x) Any information contained in the Proposal shall not in any way be construed as binding on the Authority, its agents, successors or assigns, but shall be binding against the bidder if the Consultancy is subsequently awarded to it.

#### 27.2 Technical Marking Matrix

During technical evaluation the bidders will be provided marks based on matrix below. A bidder will be declared qualified in technical evaluation on achievement of 70 marks. As already mentioned in Para 9, the bidders who qualify in technical evaluation will be considered further for financial evaluation.

Sl.No.	Criteria/ Category	Evaluation Criteria Details	Max Marks	Required supporting documents
A. Bidder Profile (15 marks)		15		
1	Annual Turnover (% of estimated cost of works from IT/SWM business	>-50% and $<60%$ (4 marks)	10	For this the Audited accounts certificate from Chartered





Sl.No.	Criteria/ Category	Evaluation Criteria Details	Max Marks	Required supporting documents
	during 2016-17, 2017-18 & 2018-19 be indexed @ 8% for a year)	>=80% and <90% (7 marks) >=90% and <100% (8 marks) >=100% and <150% (9 marks) >=150% (10 marks)		Accountant is to be submitted along with the Technical Bid.
2.	ISO Certification	• ISO 9001 • ISO 27001 • ISO 20000 (1 certificate: 2 marks) (2 certificates: 3 marks) (3 certificates: 5 marks)	5	Valid ISO Certificates from certifying authority (duly stamped & signed)
B. Pro	ject Experience (5	5 marks)	55	
3.	Value of software solution based projects (Software/Data Centre/ Disaster recovery/ Cloud services/ Intelligent SWM or the like) of min. value 50% of project cost (max 40 marks)	During past 5 years as on the last date of previous month of bid opening (% of estimated cost of works):  >=50% and <60% (10 marks/project) >=60% and <70% (15 marks/project) >=70% and <80% (20 marks/project) >=80% and <90% (25 marks/project) >=90% and <100% (30 marks/project) >=100% (40 marks/project)	40	Work Order/Work completion certificate along with CA certified certificate clearly stating the amount along with the nature of work as mentioned in the evaluation criteria.
4	Number of software solution based projects (Software/Data Centre/Disaster recovery/Cloud services/Intelligent SWM or the like) of min. value 50% of project cost (max 40 marks)	During past 5 years as on the last date of previous month of bid opening:  >=1 and <3 (5 marks)  >=3 and <5 (10 marks)  >=5 (15 marks)	15	
C. Qua (15ma	_	involved in the proposed project	15	





Sl.No.	Criteria/ Category	Evaluation Criteria Details	Max Marks	Required supporting documents	
4.	Qualification & experience of Project Coordinator (1 no.)	<ul> <li>Work experience after B.E./B.Tech in Computer Sciences/ IT: 6-10 years: 1 marks &gt;10 years: 2 marks</li> <li>Additional experience as Project Manager/ System Integrator and above: 2-5 years: 1 mark &gt;5 to10 years: 2 marks &gt;10 years: 3 marks</li> </ul>	4	CV as per the format provided in the RFP	
5.	Qualification experience of SWM Expert (1 no.)	Post qualification experience in programming for Vehicle tracking solutions/ RFID solutions/SWM: >5-8 years: 1 marks >8-10 years: 2 marks >10 years: 3 marks	3		
6	Qualification & experience of Support Engineers (10 nos.)	Graduate/ Diploma Holderwith experience of GPS, RFID etc.: Upto 2 years: 0.5 marks/person > 2 years: 1 marks/person	5	CV as per the format provided in the RFP	
7.	Qualification & experience of Call Centre Executives (6 nos.)	Graduate /Diploma Holders with experience of Call center: Upto 2 years: 0.5 marks/person > 2 years: 1 marks/person	3		
D. App	proach, Methodolo	gy & Solutions proposed (15 Marks)	15		
8.	Bidder's Approach & Methodology (based on write- up)	Overall approach of the bidder to implement and maintain the Intelligent Solid Waste Management System  • Detailed understanding of the scope of the work/ project requirement: 2 mark  • Technical Solution: 2 marks  • Approach & Methodology specific to the project: 2 marks  • Resource Management Plan: 2 marks  • Detailed Project Plan with interim milestone and timelines: 2 marks	10	Assessment to be based on a dedicated sectional note covering all requirements (in the Technical Proposal submitted by the bidder)	
9.	Bidder's awareness of risks in the project (based on	Project Risks identification and Mitigation plan related to: • MSW Operations: 1 mark • Digital Weighbridge Commissioning:	5	Document to be submitted in the Technical Bid	





Sl.No.	Criteria/ Category	Evaluation Criteria Details	Max Marks	Required supporting documents
	write-up)	<ul> <li>1 mark</li> <li>Software and Hardware deployment:</li> <li>1 mark</li> <li>Integration with external systems: 1 mark</li> <li>Operation &amp;Maintenance: 1 mark</li> </ul>		

Note: The bidders should score minimum 70 marks in Technical Evaluation for qualifying to next stage of evaluation.

The bidder shall submit write-up on all features of proposed Project through a proof of concept implementation which will be assigned marks during technical evaluation on the basis of understanding of the project, and demonstration of the capability of the technological model proposed by the bidder.

#### 27.3 Financial Evaluation of Proposal

As already mentioned at Para 9, the shortlisting of the technical bids shall be done on the basis of marks obtained during technical evaluation. The financial bids of those Bidders who secure a minimimum of qualifying marks of 70 during technical evaluation shall be opened.

It will be checked whether the OPEX (including manpower) cost is 40% or above or not (of the total bid cost). If the CAPEX cost os found to be more than 60% of the total cost (which means the OPEX cost is less than 40% of the total cost). Such bids will be rejected during financial evaluation. The OPEX cost (including manpower) has to be provided for each of the five years. Since, the entire software system will eventually be linked to the ICCC project likely to come up after one year, cloud server hosting charges has been asked for to be quoted only in the first year. Excluding this cost, if the annual variation between the different years is more than 15% then also, the financial bid will be rejected and no request for modifying the same even within the overall OPEX (including manpower) cost will be entertained. As such, the bidders should take note of these important entries in the RFP. For finding out the lowest bidder, the total CAPEX + OPEX cost (including manpower) shall be considered and discounting of the yearly O&M cost will not be resorted to.

#### 28. CONFIDENTIALITY

Information relating to the examination, clarification, evaluation, and recommendation for the selection of bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional adviser advising the Authority in relation to matters arising out of, or concerning the Selection Process. The Authority shall treat all information, submitted as part of the Proposal, in confidence and shall require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or





assert any right or privilege of the statutory entity and/or the Authority or as may be required by law or in connection with any legal process.

#### 29. CLARIFICATIONS

- (i) To facilitate evaluation of Proposals, the Authority may, at its sole discretion, seek clarifications from any bidder regarding its Proposal. Such clarification(s) shall be provided within the time specified by the Authority for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.
- (ii) If a bidder does not provide clarifications sought above within the specified time, its Proposal shall be liable to be rejected. In case the Proposal is not rejected, the Authority may proceed to evaluate the Proposal by construing the particulars requiring clarification to the best of its understanding, and the bidder shall be barred from subsequently questioning such interpretation of the Authority.

#### **30. APPOINTMENT OF AGENCY**

#### **30.1 Negotiations:**

The Selected lowest bidder may, if necessary, be invited for negotiations. The negotiations shall generally for reducing the price of the Proposal.

#### 30.2 Indemnity:

The Agency shall, subject to the provisions of the Agreement, indemnify the Authority, for an amount not exceeding the value of the Agreement, for any direct loss or damage that is caused due to any deficiency in services by Agency appointed.

#### 30.3 Award of Work:

After selection, a Letter of Award (the "LOA") shall be issued, in duplicate, by the Authority to the Selected bidder and the Selected bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Applicant is not received by the stipulated date, the Authority may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Applicant as mutually agreed genuine pre- estimated loss and damage suffered by the Authority on account of failure of the Selected bidder to acknowledge the LOA, and the next lower bidder may be considered.

#### **30.4 Execution of Agreement:**

After acknowledgement of the LOA as aforesaid by the Selected bidder, it shall execute the Agreement within 15 working days. The Selected bidder shall not be entitled to seek any deviation in the Agreement.





#### **30.5 Commencement of Assignment:**

The Agency shall commence the work immediately from the date of execution of Agreement or such other date as may be mutually agreed. If the Agency fails to either sign the Agreement or commence the assignment as specified herein, the Authority may cancel the tender, forefeit the EMD and reinvite the tender, rather than inviting the second lowest bidder (L2) for negotiations.

In such an event, the Bid Security of the L1 bidder shall be forfeited and appropriated in accordance with the provisions of this RFP.

#### **30.6 Proprietary Data:**

Subject to the provisions of this RFP, all documents and other information provided by the Authority or submitted by a bidder to the Authority shall remain or become the property of the Authority. Bidder and the Agency, as the case may be, are to treat all information as strictly confidential. The Authority will not return any Proposal or any information related thereto. All information collected, analyzed, processed or in whatever manner provided by the Agency to the Authority in relation to the work shall be the property of the Authority.

#### 31. FRAUD AND CORRUPT PRACTICES

- (i) The bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, the Authority shall reject a Proposal without being liable in any manner whatsoever to the bidder, if it determines that the bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, the Authority shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority, in regard to the RFP, including consideration and evaluation of such bidder's Proposal.
- (ii) Without prejudice to the rights of the Authority under above Clause hereinabove and the rights and remedies which the Authority may have under the LOA or the Agreement, if an bidder or Agency, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOA or the execution of the Agreement, such bidder or Agency shall not be eligible to participate in any tender or RFP issued by the Authority during a period of 2 (two) years from the date such bidder or Agency, as the case may be, is found by the Authority to have directly or through an agent, engaged or indulged in any corrupt practice,





fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

- (iii) For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:
  - a. "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOA or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Agreement, who at any time has been or is a legal, financial or technical Agency/ adviser of the Authority in relation to any matter concerning the Project;
  - b. "**fraudulent practice**" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;
  - c. "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person's participation or action in the Selection Process;
  - d. "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Selection Process.

#### 32. PRE-BID MEETING

(i) Pre-Bid meeting with the bidders shall be convened at the designated date, time and place. The queries shall be submitted to the Authority via e-mail on the e-mail address as specified in this RFP and within the stipulated time. A maximum of two representatives of each bidder shall be allowed to participate on production of an authority letter from the bidder.





(ii) During the course of Pre-Bid meeting, the bidders will be free to seek clarifications and make suggestions as per the queries submitted for consideration of the Authority. The Authority shall endeavor to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Selection Process.

#### 33. PROJECT COMPLETION & LIQUIDATED DAMAGES

The project is required to be completed in a timely manner. Period of Completion of works excluding operation & maintenance period is 7 (seven) months from the date of the signing of contract agreement.

Agency will need to strictly adhere to the implementation schedule and obtain final acceptance as per the implementation schedule. In case there is delay from bidder in obtaining the final acceptance as per the implementation schedule, 0.5% of the delayed contract value will be imposed as liquidated damage for every week of delay subject to maximum of 10% of contract value on the agency. In case of a continuous delay of 8 weeks the agreement is liable to be terminated at the discretion of the department. Authority may grant time extension to agency on written request from agency but it depends upon the whole discretion of the authority.

## 34. BIDDERS FROM COUNTRY WHICH SHARES LAND BORDER WITH INDIA

In case of Bidders which share a land border with India will be eligible to bid only if it is registered with the competent authority specified in Annexure-1 of Public procurement Division, Department of Expenditure, Ministry of Finance, Order no. F.No. 6/18/2019-PPD dated 23.07.2020. The meaning of Bidder from a country which shares a land border with India" is defined at Annexure-III of the above mentioned order of Ministry of Finance dated 23.07.2020. In case of Bidders from those countries which share land border with India, necessary certificates as mentioned in Annexure-III, as applicable have also to be attached.

#### 35. MISCELLANEOUS

- (i) The Selection Process shall be governed by, and construed in accordance with, the laws of India and the Courts in the State in which the Authority has its headquarters shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Selection Process.
- (ii) The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:
  - (a) suspend and/or cancel the Selection Process and/or amend and/or supplement the Selection Process or modify the dates or other terms and conditions relating thereto;





- (b) consult with any bidder in order to receive clarification or further information;
- (c) retain any information and/or evidence submitted to the Authority by, on behalf of and/or in relation to any bidder; and/or
- (d) Independently verify, disqualify, reject and/or accept any and all submissions or other information and/or evidence submitted by or on behalf of any bidder.
- (iii) It shall be deemed that by submitting the Proposal, the bidder agrees and releases the Authority, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/or performance of any obligations hereunder, pursuant hereto and/or in connection herewith and waives any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or future.
- (iv) All documents and other information supplied by the Authority or submitted by an bidder shall remain or become, as the case may be, the property of the Authority. The Authority will not return any submissions made hereunder. Bidders are required to treat all such documents and information as strictly confidential.
- (v) The Authority reserves the right to make inquiries with any of the clients listed by the bidders in their previous experience record.
- (vi) This RFP may not be exhaustive and may require to have additional goods and services identified during the execution of the project. Additional good/services which is not specified in the RFP and is found essential for execution of the project will be procured as per BIHAR SBD Rules and Bihar Financial Rules.





#### **SECTION II: QUALIFICATION OF THE BIDDER**

For bidding, the bidder(s) must possess the following qualification criteria on date of submission of bid:

Sl. No.	Qualification Criteria	Documents Required
1	The Bidder(s) shall be a firm or company registered/incorporated in India under the (Indian) Companies Act 1956/2013 and should be in the IT/SWM business and have been operational at least for 3 (three) years as on date of bid submission.	For Companies with Indian Origin Certificate of Incorporation/ registration under Companies Act 1956/2013.
2	The bidder eligible for participation in the tender shall be single business entity/ sole bidder.  No consortium or JV is allowed to bid for this project.	Self Declaration
3	The bidder shall have a annual turnover of at least 50% of estimated cost of works (for which the RFP has been invited) from IT/SWM business during any one the last 3 financial years 2016-17, 2017-18 & 2018-19. The turnover will be indexed @ 8% for a year.	<ul> <li>i. Audited statement for last 3 financial years viz. 2016-17, 2017-18 &amp; 2018-19 of the bidder</li> <li>ii. Certificate from the Chartered Accountant/ statutory auditor/Company Secretary clearly specifying the annual turnover from the operations from IT/SWM business.</li> </ul>
4	Bidder should have experience of implementing at least 2 (two) software solution based project (Software/Data Centre/ Disaster recovery/ Cloud services/ Intelligent SWMS or the like) as a prime Agency/Contractor in any Government organisation/ ULB starting 2016-17 with minimum value of 50% of estimated value of contract. Sub-contractor's experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria.	True/Photo Copy of Work Completion Certificate of the project work from respective client, clearly stating the amount and nature of work, as mentioned in the qualification criteria.  Only those projects which have gone live will be considered.
5	The bidder should have a <b>positive Net Worth</b> for last 3 financial years viz. 2016-17 2017-18 and 2018-19	Certificate from the Chartered Accountant clearly specifying the Net Worth for the different financial years.
6	The bidder must have a valid GST registration in India and PAN	Copy of GST registration certificate and PAN to be submitted.
7	The Bidder should possess <b>any one</b> of the following certification valid at the time of bidding:  • ISO 9001  • ISO 27001  • ISO 20000	Copy of the Valid Certificate signed and stamped by the relevant certifying agency
8	As on date of submission of bid, the bidder should <b>not be blacklisted/debared/terminated</b> by any Central / State Governmen Organization/ Department/ PSU in India.	Self Declaration, in form of Affidavit Notarized by Notary Public.





Sl. No.	Qualification Criteria	Documents Required
9	The Bidder should have or shall undertake to set up a office in Patna during execution of this project.	Self Declaration
10	The Bidder should have at least <b>50 IT/SWM professional staff on its own pay roll</b> for providing IT/SWM related services.	HR undertaking document

## Other Conditions, requirements & instructions:

- (i) Even though the bidder's meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted as proof of the qualification requirements; and /or have record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc; and/or participated in the previous bidding for the same work and had quoted unreasonable high bid prices and could not furnish rational justification to the employer.
- (ii) Bidders are required to submit only one bid per bidder. A bidder who submits more than one bid will cause all the bids submitted by him to be disqualified.
- (iii) The bidders shall bear all cost associated with the preparation of bid and the Employer will not be responsible and liable for those costs.
- (iv) The bidder(s) at its own responsibility and risk must visit and examine the site of works and its surroundings and obtained all information that may be necessary for preparing the bid and entring into a contract for project implementation. The cost of visiting the site shall be at the bidder's own expence.
- (v) Tender documents are not transfareble.
- (vi) The bidder's shall provide information regarding any litigation, current and during last two years, in which the bidder is involved; the parties concern and dispute amount.
- (vii) The bidder should submit a **Power of Attorney** of authorized representative, as per the format at given in this RFP.
- (viii) A bidder shall not be permitted to bid for works if he/she or his/her spouse's near relatives (defined as first blood relations, and their spouses) is working in any official Capacity in PSCL.
- (ix) While submitting a Proposal, the bidder should attach clearly marked and referenced continuation sheets, in the event that the space provided in the specified forms in the Appendices is insufficient. Alternatively, bidders may format, without changing the content of the forms, making due provision for incorporation of the requested information.





#### SECTION III: CONDITION OF CONTRACT

## 1. CLAUSE- 1:

Compensation for Delay (Liquidated Damage): If the contractor fails to maintain the required progress within time allowed for execution of the works or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Project-in-charge/ Chief General Manager (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

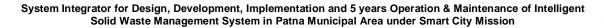
**Compensation for delay of work @ 0.5 % per week of delay to be computed on per day basis.** Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or to the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case, the contractor dies not achieve a particular milestone, or the rescheduled milestone(s), the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

#### 2. CLAUSE- 2

**Time and Extension for Delay:** The time allowed for execution of the, or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in Letter of Acceptance or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the security deposit absolutely

As soon as possible after the contract is concluded the Contractor shall submit a Time and Progress Chart for each milestone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades or sections of the work and may be amended as necessary







by agreement between the Project-in-Charge and Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate Programme has been agreed upon) complete the work. If the work(s) be delayed by:

- i) Force majeure, or
- ii) Serious loss or damage by fire, or
- iii) Civil commotion, local.
- iv) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- v) non-availability of stores, which are the responsibility of Government to supply, or
- vi) non-availability or break down of tools and Plant to be supplied or supplied by Government, or
- vi) any other cause which, in the absolute discretion of the authority is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Project-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Project-in-Charge to proceed with the works.

Request for the rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the hindering event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

In any such case the authority may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Project -in-Charge and this shall be binding on the contractor.

The basic centerlines, reference points and benchmarks will be fixed by the department. The contractor shall established at his own cost at suitable points, additional reference lines and bench marks as may be necessary and instructed by the Project-in-charge. The contractor shall remain responsible for the sufficiency and accuracy of all the bench marks and reference lines.

The Engineer may require the contractor to attend a progress review meeting during execution of work.

The Project-in-charge shall record the minutes of the meeting and provide a copy to the Contractor for compliance. These minutes will be a part of evidence in case of any request for extension of time or impunitive action against the contractor.





## **3. CLAUSE- 3**

Foreclosure of Contract due to Abandonment or Reduction in Scope of Work: If at any time after acceptance of the tender PSCL shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Project-in-Charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates for works executed at site only.

## 4. CLAUSE- 4

#### **Cancellation of contract in full or part:** If the contractor:

- (i) At any time makes default in proceeding with the works or any part of the work with due diligence and continues to do so after a notice in writing of 7 days from the Project-in-Charge; or
- (ii) Commits default to comply with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Project-in-Charge; or
- (iii) Fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Project-in-Charge; or
- (iv) Shall offer or give or agree to give to any person in PSCL or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Company; or
- (v) Shall enter into a contract with Company in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/Project-in-Charge; or
- (vi) Shall obtain a contract with Company as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- (vii) Being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act





for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or

- (viii) Being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- (ix) Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- (x) Assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Competent Authority;

The Competent Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Government, by a notice in writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Project-in-Charge shall on such cancellation by the Competent Authority have powers to :

- (a) Take possession of the site and any materials, constructional plant, implements stores, etc., thereon; and/or
- (b) Carry out the incomplete work by any means at the risk and cost of the contractor.

On cancellation of the contract in full or in part, the Project-in-Charge shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the works or in case the works or part of the works is not to be completed, the loss of damage suffered by PSCL. In determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

Any excess expenditure incurred or to be incurred by PSCL in completing the works or part of the works or the excess loss or damages suffered or which may be suffered by PSCL as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to PSCL in law be recovered from any moneys due to the contractor on any account, and if such moneys are not sufficient the contractor shall be called upon in writing and shall be liable to pay the same within 31 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days the Project-in-Charge shall have the right to sell any or all of the contractors unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the contractor under the contract and if thereafter there be any balance is outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract.





Any sums in excess of the amounts due to PSCL and unsold materials, constructional plant, etc., shall be returned to the contractor, provided always that if cost or anticipated cost of completion by Government of the works or part of the works is less than the amount which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the contractor.

#### **5. CLAUSE- 5**

**Suspension of Work:** The contractor shall, on receipt of the order in writing of the Project-in-Charge (whose decision shall be final and binding on the contractor) suspend the progress in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof, for any of the following reasons:

- a) on account of any default on the part of the contractor or;
- b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
- c) for safety of the works or part thereof. The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Project-in-Charge.

If the suspension is ordered for reasons (b) and (c) above, the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part.

#### 6. CLAUSE- 6

**Contractor Liable for Damages, defects during maintenance period:** If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wired, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within defect liability period after a certificate final or otherwise of its completion shall have been given by the Project-in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Project-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit. The security deposit of the contractor shall not be refunded before the expiry of defected liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

#### **7. CLAUSE- 7**

**Recovery of Compensation paid to Workman:** In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensations Act, 1923, Government is obliged to pay compensation to a workman employed by the contractor, in





execution of the works, PSCL will recover from the contractor the amount of the compensation so paid; and without prejudice to the right of the PSCL under sub-section (2) of section 12, of the said Act, PSCL shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise. PSCL shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs for which PSCL might become liable in consequence of contesting such claim.

#### **8. CLAUSE- 8**

Ensuring Payment and Amenities to Workers if Contractor fails: In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Government is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by P.W.D. Contractors, Government will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the Government under sub-section (2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise Government shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Government full security for all costs for which Government might become liable in contesting such claim.

#### 9. CLAUSE- 9

**Labour Laws to be complied by the Contractor:** The contractor shall obtain a valid licence under the State Labour Act, and the Contract Labour (Regulation and Abolition) Central rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) ACt, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of the contract arising out of the resultant non-execution of the work. **CLAUSE- 6** 

#### 10. CLAUSE- 10

**Levy/Taxes payable by Contractor**: Sales Tax or any other tax on materials in respect of this contract shall be payable by the contractor according to law in effect.





## 11. CLAUSE- 11

Release of Performace Security: On completion of the whole work, half of the total retention money shall be released to the contractor after one month of completion and balance half of the total amount of security will be returned after completion of Defect Liability period, provided that all defects notified by Project-in-Charge has been rectified by Contractor and Project-in-Charge has issued certificate for the same and also after recovery of any dues. Within 15 (fifteen) days of the date of issue of the Completion Certificate in respect of CAPEX, the Authority shall discharge the bank guarantees and the contractor shall furnish another PBG for the OPEX period being 10% of OPEX cost.

#### 12. CLAUSE- 12

**Responsibility of Technical Staff and employees:** Technical officers / staff deployed by the Contractor at any site will also be responsible for inferior quality / poor performance of any work and his name will be circulated to all Smart Cities/ Government of Bihar works Deptt. to debar from any other site, if his name is being proposed by other contractor.

#### 13. CLAUSE- 13

**Contractor's Risks:** All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

#### 14. CLAUSE- 14

**Insurance:** The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

Alteration to the terms of an insurance shall not be made without the approval of the Project-in-Charge.

Both parties shall comply with any conditions of the insurance policies.





## 15. CLAUSE- 15

**Commencement of Works:** The contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to Tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

## 16. CLAUSE- 16

**Recovery:** Any amount found recoverable from the contractor shall be recovered as public demand under the Bihar Public Demand Act. without prejudice to any other mode of recovery.





# **VOLUME II**





#### SECTION IV: SPECIAL CONDITION OF CONTRACT

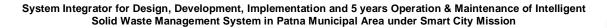
## 1. SCOPE OF WORK

The scope of work include, but not limited to, installation of OR codes on households in the Patna Municipal area as per the locations provided, providing hand-held QR code readers and smart phones (as detailed in BOQ), geo-fencing of the project area and geotagging of households (utilizing available GIS maps); installation and commissioning of Vehicle Tracking System (VTS) for real time tracking of about 1,125 vehicles (consisting of Open Tipper, Closed Tipper, e-Cart, Hywa, Robat Bobcart, etc) inside the Municipal area and many a times going upto landfill site (via transfer stations) at Ramchak-Bairia (6 km from Zero mile, Patna on Patna-Gaya Road) to allow better inventory maintenance, so that wastage of trips of the vehicles is reduced to the extent practicable; Bio-metric Attendance System with face recognition facility; providing a platform/system with event generation with capabilities to notify the supervisors, zonal officers and the Municipal Commissioner through Mobile App during Municipal Solid Waste operations viz. door to door collection, garbage cleaning from secondary points (like transfer stations); provide a Greivance Redressal System (GRS); providing, installing and commissioning Weigh Bridge (including Boom barrier of size provided in BOQ) together with constructing a suitable Control Room and providing & installing PTZ cameras at landfill site at Ramchak-Bairiya.

MSI has to procure and install QR Code at all household located in Patna Municipal Corporation. The network connectivity must be planned and implemented to share the Smart Elements information to Command Control Center for further processing. It will be the SI's responsibility to procure Handheld QR Code readers and Smart phones. SI should use the Smart elements and geo fence and geo tag them it with GIS Maps/ existing GIS Portal. The proposed system shall help the Patna Municipal Corporation to track and monitor the various activities of Municipal Solid Waste operations using IT hardware and system software mentioned above.

The application should make possible viewing of the historical data obtained from all activities viz. BOA, VTS, GRS, etc.; provide qualified and trained personnel (as detailed in RFP) viz. one Project Coordinator, one SWM Expert, ten Support Engineers and six Call Centre Executives for carrying out 0&M for 5 years. In addition, the application should provide a historical view of the data from all the deployments including the cleaning pattern and the timing. The platform should have event generation capabilities that notify the Supervisors and Zonal Officers and the Commissioner through Mobile App, when MSW operations viz. Door to Door Collection, garbage cleaning from secondary points & transfer stations. The proposed system should help the PMC to track and monitor the various activities of MSW operations using the IT hardware and System. The ICCC in turn should process the data and allow the Supervisors and Operators to monitor the status real time and schedule an on-demand clean-up as recommended by PATNA MUNICIPAL CORPORATION. In addition, the SWM shall also allows better inventory maintenance and reduction of wastage of trips of the vehicles.

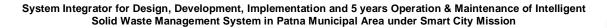
The primary scope shall include End-to-End Solution to implement and to provide support services & maintenance which include the following:







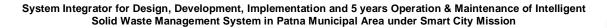
- (i) Supply and Commissioning of QR Code tags and readers for effective "Door to Door Collection Monitoring System"
- (ii) Designing, developing and integration of the application software for existing Vehicle Tracking with new Monitoring System (data feed access would be provided)
- (iii) Commissioning of Digital Static Weight Automation System at Dump Yard with Control Room.
- (iv) Implementation of Workforce Management System through Biometric attendance.
- (v) Supply of necessary hardware/ software and their installation, configuration Implementation of the IT solution.
- (vi) Sizing of Hardware, Software and network devices required in the data Centers for using the Integrated SWM.
- (vii) Design, Development, Supply, Deployment & Implementation of Web Based Application software integrated with GPS, RFID devices, weighbridge application, Treatment & disposal facilities, and complaint management modules.
- (viii) Testing and Commissioning of the solution for necessary hardware.
- (ix) Monitoring of the usage, comprehensive maintenance for a period of 5 years post successful Go Live, SI shall maintain the sufficient spares to ensure 24 x 7 up time.
- (x) Maintenance of all devices and after warranty period including the replacement of devices in cases of damage, new vehicle or any other changes as and when required.
- (xi) Maintenance of web-based application for Integrated SWM during and after warranty period.
- (xii) Imparting Training & Capacity Building Program/ Workshops for all staff regarding operation of new digital devices and its features for speedy actions in SWM processes.
- (xiii) Development of Mobile Application for workforce and citizens in both language (Hindi & English) versions as per the requirements of PSCL.
- (xiv) Install the application and database software in the Servers allotted for the same in the data center being installed as part of ICCC Project, configure the same to suit the needs of the stakeholders.
- (xv) Responsibility of integrating this application with the Command and Control Centre through appropriate APIs (Application Programming Interfaces).
- (xvi) SI will be Responsible for providing distributed cloud server with multiple nodes till the Application is migrated to ICCC data center of Patna Smart City.







- (xvii) System Integrator (SI) will be responsible for complete end to end implementation of the project. PSCL/PMC will only provide necessary space and electricity to set-up monitoring control room.
- (xviii)SI should also take into account the Project Implementation and Management cost during the DLP period of one year.
- (xix) SI will be provided with the GIS layers present with the PMC and it will be responsible to integrate the existing GIS data with the proposed Intelligent SWM Solution.
- (xx) SI shall provide the band-width required for operationalizing the project. The bandwidth requirement shall be analyzed and procured by the SI at its own cost/risk.
- (xxi) SI shall install and commission connectivity across all designated locations.
- (xxii) SI shall establish high availability, reliability and redundancy of the network elements to meet the Service Level requirements.
- (xxiii) SI shall be responsible for planning and design of the access network architecture (access controllers, backhaul connectivity, routers, switches, etc.) to meet the technical, capacity and service requirements of the Project.
- (xxiv) SI shall be responsible for up-gradation, enhancement and provisioning additional supplies of network (including active/passive components), hardware, software, etc. as required by the Authority.
- (xxv) SI shall ensure that the infrastructure provided under the project shall not have an end of life within 24 months from the date of bidding.
- (xxvi) SI shall ensure compliance of all mandatory government regulations as amended from time to time.
- (xxvii) The SI shall ensure that all the peripherals, accessories, sub-components required for the functionality and completeness of the solution, including but not limited to devices, equipment, accessories, patch cords (fiber), cables, software, licenses, tools, etc. are provided according to the requirements of the solution.
- (xxviii) PSCL/PMC shall not be responsible if the SI has not provisioned some components, sub- components, assemblies, sub-assemblies as part of Bill of Materials in the RFP. The SI shall have to provision these & other similar things to meet the solution requirements at no additional cost and time implications to PSCL.
  - (xxix) All the software licenses that the SI proposes shall be perpetual software licenses along with maintenance, upgrades and updates for the currency of the contract. The software licenses shall not be restricted based on location and Authority shall have the flexibility to use the software licenses for other requirements if required.
  - (xxx) The SI shall ensure there is a 24x7 comprehensive onsite support for duration of the contract for respective components to meet SLA requirement. The SI shall







- ensure that all the OEMs have an understanding of the service levels required by Authority.
- (xxxi) Considering the criticality of the infrastructure, SI is expected to design the solution considering the RFP requirement of no single point of failure with high level of redundancy and resilience to meet the network uptime requirements.
- (xxxii) SI shall be responsible for periodic updates & upgrades of all equipment, cabling and connectivity provided at all locations during the contract period.
- (xxxiii) SI shall be responsible for setting up / building / renovating the necessary physical infrastructure including provisioning for network, power, rack, etc. at all the locations.

(xxxiv) SI is expected to provide following services, including but not limited to:

- Provisioning hardware and network components of the solution, in line with the proposed authority's requirements.
- Size and commissioning of network devices (like Router, switches, security equipment including firewalls, IPS / IDS, routers, etc. as per the location requirements with the required components/modules, considering redundancy and load balancing in line with RFP.
- Size and provision the WAN bandwidth requirements across all locations considering the application performance, data transfer, DR and other requirements for smart city initiatives.
- Size and provision the internet connectivity for Service Provider network and Network Backbone.
- Size and provision for bandwidth as a service for operations of CCTV surveillance
- Liaise with service providers for commissioning and maintenance of the links.
- Furnish a schedule of delivery of all IT/Non-IT Infrastructure items.
- Authority may at its sole discretion evaluate the hardware sizing document proposed by the SI. SI needs to provide necessary explanation for sizing to the Authority.
- Complete hardware sizing for the complete scope with provision for upgrade.
- Specifying the number and configuration of the racks (size, power, etc.) that shall be required at all the locations.





# 2. DELIVERABLES & TIMELINE

S. No	Project Deliverables	Timelines (in Weeks)
1	Project Kick Off (This would be done after Contract Signing between Patna Smart City Ltd., Patna Municipal Corporation and the Bidder as per Agreement)	Т
	Module 1	
2	Study / Review of existing systems and technology deployed for solid waste management	T+1
3	Inception Report with Planning	T+2
4	Software Requirement Specification Submission	T+4
	Module 2	
5	Control Room Setup at HQ	T+5
6	Supply Vehicle Tracking Device and RFID with installation on available MSW vehicles provided by PMC/PSCL	T+6
7	Deployment of SWM Application	T+8
8	Deployment of Mobile Application	T+8
	Module 3	
10	Commissioning of Digital Weighbridge	T+9
9	Supply of QR Code Tags	T+10
10	Citizen Grievance Redressal Helpdesk Setup	T+12
	Module 4	
11	Control Room Setup at Circle Offices	T+13
12	Biometric Installation	T+16
13	Manpower Deployment	T+18
14	Training (For Authorities, City Managers, other officials) to monitor attendance & operations through control centre	T+18
	Module 5	
15	QR Code Tags Installation	T+20
17	Supply of Mobile Devices	T+20





S. No	Project Deliverables	Timelines (in Weeks)
18	Installation of remaining/new Vehicle Tracking Device and RFID on MSW vehicles provided by PMC/PSCL	T+24
19	Training (Sanitation Workers & other officials) and User Manuals to monitor field door to waste collection operations	T+24
20	Go Live (Final Acceptance and Sign off by AUTHORITY)= G	T+28
21	Detailed Operation and Maintenance (O&M) Plan & Reports  Operation and maintenance procedures and guidelines  Tracking report of all project assets inreal-time  Annual maintenance requirements, timelines, and schedules  Detailed Approach of O&M teams  Detailed plan for monitoring of SLAs and performance of the overall system  SLA Conformance & Compliance Report  Fortnightly Progress Report  Monthly SLA Monitoring Report and Exception Report  Quarterly Security Report  Issues logging and resolution report  Cloud Consumption Report	G + 5 Years

Note: The Project execution period is 7 months

# 3. PAYMENT SCHEDULE

## 3.1 PAYMENT OF CAPEX

Sr. No.	Component	Payment Schedule for turnkey and other items
1	SWM Software Applications	5% will be paid after submission of Software
2	Citizen Grievance Redressal Mobile Application (Android/iOS)	Requirements Specification Report, 30% will be paid on development of software and
3	Mobile App for Supervisors and Drivers	sharing with PSCL,
4	Weighbridge Desktop Application	30% will be paid after successful testing, 25% will be paid on commissioning of softwares and
5	Toll free Number, GSM Gateway and Helpdesk Software with server	remaing 10% will be paid after completion of CAPEX works
6	QR Code on all property in PMC area	After installation, on pro rata basis
7	Handheld Mobile Devices	After supply, on pro rata basis
8	Data SIM Cards(4G)	After supply, on pro rata basis
9	Wall mounted Biometric Device	After supply & commissioning
10	CCTV (PTZ cameras) with DVR	After supply & commissioning
11	Computer, UPS(Workstations)	After supply & integration with system
12	Internet connection (Lease line 6Mbps/10Mbps) annual/ Internet Data Card	After Internet connection is provided & commissioned





Sr. No.	Component	Payment Schedule for turnkey and other items	
13	Monitoring LED TV (55 inch)	On supply & installation	
14	IP Phones	On supply & installation	
15	Vehicle Tracking Device (GPS devices)	On supply & commissioning	
16	RFID Readers with Pole Mount at Weigh	On supply & installation	
	Bridge		
17	Windshield RFID Tags for Compactor	On supply & installation on vehicles	
1.7	Vehicles		
18	Boom Barrier	On supply & commissioning	
19	Dot Matrix Printer	On supply & integration with system	
20	Static Digital Weighbridge	On supply & commissioning	
21	All-in-One Printer	On supply& integration with system	

Note: These above payments of CAPEX is subject to the deliverables and timelines order defined in Para-2 of Section-IV (Special Conditions of Contract) in order to monitor the progress in an orderly manner which needs to be adhered by the successful bidder.

#### 3.2 PAYMENT OF OPEX

- i. Opex portion of the contract price shall be paid bi-monthly, over 5 years time.
- ii. The bidder will have to raise the invoice after end of every two months period along with the bi-monthly report and submit it to PSCL.
- iii. The payment will be made within 15 days of submission of bills, if received correct in all respect to the PSCL.

#### 4. DOCUMENTATION

For smooth handing over/transfer of the system at the time of handing over, the bidder has to submit all the relevant documents, working status, detailed diagrams and drawings (Software and Hardware used in the project) and also ensure that the entire system is fully functional.

To authenticate this process, appropriate authority will be named/informed by Patna Smart City Limited (PSCL).

#### 5. SCALABILITY

The system should be capable of accommodating future expansions, if any, to the project.

#### 6. DATA PRIVACY

All created, stored, database, processed, archived data etc. will be the property of Patna Smart City Limited (PSCL). The data must not be used/transfered in any format without written permission /authorization from Patna Smart City Limited (PSCL).

#### 7. SCOPE OF TRAINING

Detailed training shall be arranged for officials of PMC & PSCL as designated by PSCL.





#### 8. SCOPE OF ACCEPTANCE TESTING

To get Acceptance Certificate all the functionality, features and configuration relevant to this project shall need to be documented and demonstrated by the successful bidder. System should be demonstrated to run successfully, without any bug.

#### 9. OPERATION & MAINTENANCE SUPPORT

As part of its scope of work the Selected Bidder needs to provide 5 (five) years of Operational & Maintenance Support after successful Implementation. As part of this scope the Selected Bidder will perform the following tasks:

- (i) Perform system administration tasks, such as managing the user access, creating and managing users, taking backups etc.
- (ii) Performance tuning of the system to ensure adherence to performance requirements as indicated in the RFP.
- (iii) Undertake end-to-end management of database on an on-going basis to facilitate smooth functioning and optimum utilization including regular database backup and periodical testing of backup data, conduct configuration review to tune database, maintain the necessary documentation and manage schemes to database schema, disk space, user roles, and storage.
- (iv) Escalate and co-ordinate with its OEMs for problem resolution, wherever required.
- (v) The selected Bidder will be required to comply with various policies relating to monitoring and management of infrastructure such as IS Policy, backup and archival policy, system software update policy etc.
- (vi) Selected Bidder shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements and maintenance.

#### 10. MANAGED SERVICES

- (i) During the technical support service, the System Integrator will provide required warranty & maintenance services. System Integrator are expected to quote their rates accordingly.
- (ii) Deployments of Technical Support Manpower as per the requirement of the project is to be made. Technical Support Resources are required to be deployed at the Operation Center to operate the Application Software developed.

## 11. MANPOWER

To operate the supplied solution, the successful Bidder will have to provide manpower to execute the work and provide requisite persons as specified in this





RFP to operate and maintain the system every day. Deployed persons should have knowledge of software operations and should be well trained to operate this system. The training will be on the cost of the System Integrator (SI).

#### 12. MOBILIZATION ADVANCE

For Mobilization advance, the following conditions shall be applicable:

- a. The Employer on the specific request of the successful bidder will provide an **interest-bearing mobilization advance (@ 10% simple interest)** on the Contract Price in <u>two stages of 5% each</u>, subject to maximum 10% of CAPEX value amount.
- b. This Mobilization advance shall be released only after receipt and verification of Bank Guarantee of 110% of the advance value.
- c. The advance so paid shall be adjusted from the running bills on pro-rata percentage basis in such a way that the entire advance is recovered by the time 70% of the gross CAPEX value of the contract is paid, together with adjustment of the interest due.
- d. Deduction of TDS shall be made as per the Income Tax provisions.

## 13. DEFECT LIABILITY PERIOD (DLP)

The Defect Liability Period (DLP) will be of one year after commissioning and Go-live on the terms and conditions given in this section. During this period which will go along the 1<sup>st</sup> year of 0&M the Bidder shall provide complete maintenance and operation support and provide all the proposed solution as outlined in this RFP:

- During the Defect Liability Period, the bidder shall covenant that the goods supplied under the contract are new, unused, or of Higher version/models.
- The bidder further covenant that the goods supplied under this contract shall have no defects arising from design, materials or workmanship. The bidder has to submit anundertaking that the goods supplied by him are new and unused.
- PSCL or designated representatives of the Employer shall promptly notify successful bidder in writing of any claims arising during Defect Liability Period. Upon receipt of such notice, the bidder shall, within the Defect Liability Period and with all reasonable speed (usually 3 days, if not taken approval for extended period), repair or replace the defective systems, without costs to PSCL and within time specified and acceptable to PSCL.
- If the successful bidder, having been notified, fails to remedy the defect(s) within the period specified in the contract, PSCL may proceed to take such reasonable remedialaction as may be necessary, at the successful bidder's risk and expense and without prejudice to any other rights maximum to the value of the defected item, which PSCL may have against the bidder under the contract.
- Implementation Agency has and will have all necessary licenses, approvals, consents of third Partiesfree from any encumbrances and all necessary technology, hardware and software to enable it to provide the Services.





- The Services will be supplied in conformance with all laws, enactments, orders and regulationsapplicable from time to time.
- Implementation Agency will warrant that the solution provided under the contract is new, of the higher version /models and incorporate all recent improvements in design and materials unlessprovided otherwise in the contract.
- The Implementation Agency shall ensure defect free operation of the entire solution and shall replace any such components, equipment, software and hardware which are found defective and during the entire contract period the
- Implementation Agency shall apply all the latest upgrades/patches/releases for the software after appropriate testing. No additional costs shall be paid separately for the Defect Liability Period other than what are the costs quoted by the Implementation Agency and as specified in the contract.
- If the Implementation Agency uses in the course of the provision of the Services, components, equipment, software and hardware manufactured by any third party/OEM and which are embedded in the Deliverables or are essential for the successful use of the Deliverables, it will pass through third party manufacturer's Warranties relating to those components, equipment, software and hardware to the extent possible.

## 14. OPERATION & MAINTENANCE PERIOD (O&M)

Bidder shall provide Comprehensive Operation & Maintenance Period support for all the proposed solution as outlined in this RFP for a period of 5 years from the date of Go-live of the project. O&M shall include all the work performed by Bidder including supply, installation, integration, testing and commissioning, maintenance and operation of the system including hardware and software and all equipment's.

The Bidder shall provide maintenance services including replacement of faulty equipment during the O&M period. During the O&M period if any part of the System gets damaged then the System Integrator should inform the cost of replacing the device/ part therof to the Patna Smart City Limited (PSCL) and if, Patna Smart City Limited (PSCL) is of the view that the same is due to fault on part of System Integrator, it will recover the same from the System Integrator; otherwise the due course of O&M will be adhered to.

If the Systen Integrator fails to comply with any of the above, the authority may proceed to take such remedial action as may be necessary at the system integrator's risk and expense and without prejudice to any other rights, which the authority may have against the System Integrator under the Contract.

# 15. SERVICE LEVEL AGREEMENT (SLA)

#### A. SLA Objectives

Agency shall provide services as per Service Level Agreement (SLA) matrix, which defines maximum response as well as rectification times for all kinds of infrastructure/equipment





covered under the contract. Selected Agency is required to provide minimum 99% overall uptime for components/services, measured bi-monthly.

#### **B. SLA Matrix**

The Selected Agency shall provide Operation & Maintenance Contract support services as per SLA matrix given below, subject to force majeure:

Sl. No.	Service category	Parameter	Expected Service Level
	Project	Implementation,	Completion of
1.	implementation	Completion and	project within
	Implementation	Final acceptance after testing	time limit
2.	Operation &	O&M should be performed on a daily	>=99%
۷.	maintenance	basis	>-99%
3.	Manpower	The team should work daily i.e. all 7	>=99%
Э.		days of the week	Z=3370
		A Defects Liability period is a set period	
	Defect Liability	of time (one year in present case) after	
4.		successful commissioning, during	99%
4.		which a contractor has to return to the	99%
		site and remedy defects	
		Permissible down time is 2 hrs.	

## C. SLA Requirements

Selected Agency should ensure availability of the systems as per SLA matrix. This will exclude scheduled preventive maintenance. Availability of the systems shall be calculated on weekly basis. Availability of the systems will be based on the report of system logs, equipment logs, downtime and rectification reporting etc. In case the availability for each of the system under Defect Libality Period/Annual Maintenance Contract is less than the agreement, the non- performance deduction (i.e. penalty) from scheduled payments for the system under warranty/annual maintenance contract shall be as per the following table:

Sl. No.	Parameter	Penalty
1.	Faulty services upto 2%	No penalty
2.	Faulty services above 2% upto 10%	2% penalty (on monthly payment)
3.	Faulty services of more than 10%	3% penalty (on monthly payment)

However, if the delay is caused due to reasons outside the control of the Selected Integrator, or due to force majeure, then the Managing Director, Patna Smart City Limited (PSCL) reserves the right to waive off the penalties.





#### D. Breach of SLA

In case the Successful Integrator does not meet the service levels mentioned in this RFP, for three (3) continuous occasions, Patna Smart City Limited (PSCL) will treat it as a case of breach of Service Level Agreement. The following steps will be taken in such a case: -

- (i) Patna Smart City Limited (PSCL) will issue a show cause notice to the System Integrator.
- (ii) System Integrator should reply to the notice within three working days.
- (iii) If PSCL/PMC is not satisfied with the reply, PSCL/PMC **may initiate stricter penalty for the remaining period** of the contract as per their own discretion.

#### 16. PRICING

All prices should be quoted in Indian Rupees and should be inclusive of all taxes. Bidder pricing should cover both material and services, wherever applicable. Bidder shall ensure compliance of all applicable prevailing laws.

## 17. RISK MANAGEMENT

Bidder shall at his own expense adopt suitable Risk Management Methodology to mitigate all risks assumed under this RFP. The Bidder shall underwrite all the risk related to its personnel deputed under this project as well as equipment and components and any other belongings or their personnel during the entire period of their engagement in connection with this project and take all essential steps to reduce and mitigate the risk. Patna Smart City Limited (PSCL) will have no liability on this count.

#### 18. PUBLICITY

The Bidder shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Patna Smart City Limited (PSCL) gives the Bidder its written consent for the same.

#### 19. INSURANCE

- (i) It is suggested that the goods supplied under the contract shall be fully insured by the contractor at their own cost, in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery up to user site as per other related stipulations made in the "Special Conditions of Contract Section IV" of RFP.
- (ii) The insurance should be for replacement value from "Warehouse to warehouse (final destination)" on "All Risks" valid upto three (3) months of completion of delivery, installation and commissioning.
- (iii) Transport of the goods to the project site(s) shall be arranged by the SI at their cost.





## 20. ASSIGNMENT, SUBLETTING AND OUTSOURCING

The whole work included in the Tender shall be executed by the identified vendor and the vendor shall not directly or indirectly transfer, assign, sublet the contract or any part thereof or interest therein, without the prior written consent of Patna Smart City Limited (PSCL). In the event of doing so, it shall result in termination of contract and forfeiture of Security Deposit/PBG.

## 21. USER LICENSE AND PATENT RIGHTS

- (i) The SI shall provide licenses for all software products, whether developed by it or acquired from others. In the event of any claim asserted by a third party for software piracy, the vendor shall act expeditiously to extinguish such claim. If the vendor fails to comply and the Patna Smart City Limited (PSCL) is required to pay compensation to a third party resulting from such software piracy, the vendor shall be responsible for compensation including all expenses, court costs and lawyer fees. Patna Smart City Limited (PSCL) will give notice to the vendor of such claim, if it is made, without delay.
- (ii) The SI shall indemnify the purchases against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the goods, software package or any part thereof at their own cost.

#### 22. INDEMNITY

The successful bidder/System Integrator shall indemnify, defend and hold harmless the contracting authority, and their End Users, and their respective officers, directors, employees, subsidiaries, affiliates and successors and permitted assigns, from and against any and all losses, liabilities, damages, costs or expenses, including reasonable legal fees and disbursements and costs of investigation, litigation, settlement, judgment, interest and penalties, arising from or relating to third party claims, demands or actions (collectively, "Claims") arising from or relating to:

- (a) any breach by the successful bidder/SI] or its agents, employees or subcontractors of any of the warranties if any, pertaining to the Software and Documentation that are passed through to End Users;
- (b) any injury to any person, including death, illness or bodily injury, or damage to real or tangible personal property, resulting from (i) the Software, Documentation or any other Deliverables furnished by the successful bidder/SI or (ii) any act or omission of successful bidder/SI or its agents, employees or subcontractors; and
- (c) without limiting paragraph (a) above, any alleged or actual infringement, violation or misappropriation of any Intellectual Property Rights of any third party by successful bidder/SI or its agents, employees or subcontractors or any Software, Documentation or other Deliverables furnished by successful bidder/SI to the contracting authority.





While providing services as per Scope of Work, the successful bidder shall ensure that there is no infringement of any patent or design rights or violate any intellectual property or other right of any person or entity and shall comply with all applicable Laws, Statute, regulations and Governmental requirements and he/she shall be solely and fully responsible for consequence / any actions due to any such infringement.

In instances of change in ownership/control of a company during the project period, it shall be the responsibility of the bidder to ensure that new management continues to deliver the terms of the contract. And in cases where there is such a change during the bidding process, the Department/Contracting authority reserves the right to reject the bid.

## 23. FORCE MAJEURE

Neither party shall be liable to the other for any loss or damage occasioned by or arising out of acts of GOD such has Unprecedented flood, Volcanic eruption, Earthquake or other convulsion of nature and other acts such as general/ partial strikes by a section of government employees/ invasion, the act of foreign countries/ hostilities or war like operations before or after declaration of war, rebellion/ military or usurped power which prevent performance of the contract and which could not have been foreseen or avoided by a prudent person.

The successful bidder shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. However, the Force Majeure shall not cover the price fluctuation of components.

For purposes of this Clause, Force Majeure means an event or situation beyond the control of the successful bidder that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the successful bidder. Such events may include, but not be limited to, acts of Patna Municipal Corporation in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

If a Force Majeure situation arises, the successful Bidder shall promptly notify Patna Municipal Corporation Limited in writing of such condition and the cause thereof. Unless otherwise directed by Patna Municipal Corporation in writing, the successful Bidder shall continue to perform its obligations under the Contract as far as it is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

#### 24. LEGAL MATTER

i. The Contract and the transactions contemplated therein shall be governed by and construed in accordance with the laws of India.





- ii. The Contract and the transactions contemplated therein shall be subject to the exclusive jurisdiction of the competent Courts in Patna, India.
- iii. If any dispute arises between the Parties hereto during the subsistence or thereafter, in connection with the validity, interpretation, implementation or alleged material breach of any provision of the Agreement or regarding a question, including the questions as to whether the termination of the Contract Agreement by one Party hereto has been legitimate, both Parties hereto shall endeavor to settle such dispute amicably. The attempt to bring about an amicable settlement at the level of the Managing Director, PSCL is considered to have failed as soon as one of the Parties hereto, after reasonable attempts gives 15 days' notice thereof to the other Party in writing.

## 25. DEFECT LIABILITY PERIOD (DLP)

All the supplied goods shall be new, unused, and of the most recent or current models, and that they shall incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The goods shall be free from defects arising from any act or omission of the successful bidder or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.

Bidder shall provide warranty for the faithful and satisfactory performance of the entire integrated system (as per scope of work). DLP shall include all the work performed by Bidder including supply, installation, integration, testing and commissioning, etc. (Equipment's, Application software)

DLP shall be for one year post successful Go-live and operation & maintenance shall be for 5 years from the date of successful Go-live/ implementation, whichever is later.

The Bidder shall provide free maintenance services including replacement of faulty equipment during the DLP period.

If equipment is not working due to accident or intentionally broken, Patna Smart City Limited (PSCL) will recover its cost from selected system integrator.

Bidder shall provide necessary Software updating/upgrading free of cost during the DLP.

#### **Spare parts:**

- i. The SI may be required to provide any or all of the materials, notifications and information pertaining to spare parts manufactured or distributed by the Vendor of the product being used.
- ii. Such spare parts as the PSCL may elect to purchase from the Vendor, provided that this selection shall not relieve the SI of any warrantee obligations under the contract.







- iii. In the event of termination of production of the spare parts, an advance notification to the PSCL of the pending termination, in sufficient time, to permit the PSCL to procure needed requirements and
- iv. The SI/Vendor shall ensure availability of spares in stock at his nearest service center for immediate delivery such spare parts as:
  - (a) are necessary for a minimum of 5 years of operation after installation at the Authority's sites
  - (b) are necessary to comply with specifications

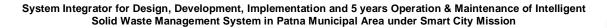
## 26. RIGHT TO VARY QUANTITY

- a) At the time of award of contract, and or during the original validity of this bid and or during the extended validity of this bid, the quantity of goods, works or services originally specified in the bidding documents may increase or decrease as per project requirement. In such a case there shall be no change in the unit prices or any terms and conditions of contract.
- b) If Patna Smart City Limited (PSCL) does not procure any item or procures less than the quantity specified in the bidding documents due to changes in circumstances, the bidder shall not be entitled for any claim/compensation.
- c) Extra items or additional quantities may be placed which will have to be provided on the rates and conditions given in the contract.

#### **27. TERMINATION:**

The Authority may terminate the Contract if the other party causes a fundamental breach of the Contract which may include, but shall not be limited to the following:

- (i) Termination of Contract by the Patna Smart City Limited (PSCL) due to non-performance during the execution of Project by giving 7 days prior/ advance notice as given in "Special Conditions of Contract Section IV" due to:
  - Performance is below expected level
  - Non adherence to the timelines of the Project
  - Quality of work is not satisfactory;
- (ii) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (iii) The Authority gives Notice to correct a particular Defect but the Contractor fails to correct it within a reasonable period of time determined by the Project-in-Charge; and which causes a fundamental breach of Contract;
- (iv) The Contractor does not maintain the required security, durind the contract period;







- (v) The Contractor has delayed the completion of works by such number of days for which the maximum amount of liquidated damages reaches 10% as defined earlier in liquidated damages; and
- (vi) If the Contractor, in the judgment of the Authority has engaged in corrupt or fraudulent practices in competing for award of work or in executing the Contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the borrower, and includes submission of fake documents (BG/experience, etc.), collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the borrower of the benefits of free and open competition."

When either party to the Contract gives notice of a breach of contract for a cause other than those listed in above clauses, the Authority shall decide whether the breach is fundamental or not.

Notwithstanding the above, the Authority may terminate the Contract for convenience.

If the Contract is terminated the Contractor shall stop work immediately and handover the solution to PSCL, as soon as reasonably possible.

In case of any contradiction between aforementioned "Termination" clause and the entries under the "Special Conditions of Contact – Section IV" of this RFP viz. 'Cancellation of Contract in full or part' or 'Forecloser of contract due to Abondonment or Reduction in Scope of work', the later i.e. those under "Special Conditions of Contact" will be applicable/ prevail.

#### 28. PAYMENT UPON TERMINATION

- (i) If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Authority shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Authority exceeds any payment due to the Contractor, the difference shall be a debt payable to the Authority for which the recovery shall be made from the PBG on forefeiture.
- (ii) If the Contract is terminated at the Authority's convenience, the Authority shall issue a certificate for the value of the work done, less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law. No extra cost will be paid by the Authority for expenditure towards removal of Equipment,



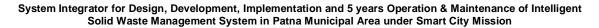


repatriation of the Contractor's personnel employed solely on the Works and the Contractor's costs of protecting and securing the Works.

## 29. ARBITRATION POST SIGNING OF CONTRACT

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in-before mentioned and as to the quality of workmanship, softwares or materials used on the work or as to any other question, claim right matter or thing whatsoever in any way arising out of or relating to contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

- (i) If the contractor considered any work demanded of him to be outside the requirements of the contract, or dispute any drawings, record or decision given in writing by the Project-in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 7 days request the Chief General Manager in writing for written instruction or decision. Thereupon, the Chief General Manager shall give his written instructions or decision within a period of fifteen days from the receipt of the contractor's letter.
- (ii) If the Chief General Manager fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Chief General Manager, the contractor may, within 15 days of the receipt of Chief General Manager 's decision, appeal to the Managing Director who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Managing Director shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the Managing Director for appointment of arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.
- (iii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitrator appointed by the Chairman, PSCL or the administrative head of PSCL. If the arbitrator so appointed is unable or unwilling to act or resign his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.
- (iv) It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Managing Director, PSCL of the appeal.
- (v) It is also a term of this contract that no person other than a person appointed by







such Chairman, PSCL or the administrative head of PSCL as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitrator at all.

- (vi) It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 45 days of receiving the intimation from the Project-in-Charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the PSCL shall be discharged and released of all liabilities under the contract in respect of these claims.
- (vii) The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.
- (viii) It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.
- (ix) It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

In case, the reconciliation at the level of Managing Director, PSCL does not yield result and a dispute is referred to arbitration, the arbitration shall be under the Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof. **All arbitration shall be held at PATNA and at no other place.** 

In case PSCL chooses to award the contract to an eligible bidder through this tender process, and its subjected to a third party litigation, PSCL would be free to proceed the contract award and works process. If the litigation is in favour of the third party resulting in termination of awarded contract and retendering process, PSCL would pay out the existing Contractor to the tune of work completed upon submission of sufficient proof of material supplied and other expenses incurred.





# **VOLUME III**





# **SECTION V: FUNCTIONAL & TECHNICAL SPECIFICATION**

The technical/functional specifications for the proposed digital solutions are detailed further in this section.

# 1. SWM Software Application (Turnkey item)

S.No.	Module	Functional Specification
1.	Executive	a. Dashboard feature shall provide quick and easy view to know
	Dashboard	the overall fleet status on real time basis. It shall display status
		information of waste collections across the municipal area and
		the dumping yard at RamchakBairiya. The solution shall have
		option to customize dashboard, based on user role, including
		citizens, for data available in public domain. The dashboard of
		operator can be different from the dashboard of higher officials.
		The Dashboard view shall provide the following minimum
		information:
		a. Ward wise/Circle wise collections of garbage
		b. Activity report- contractor wise
		c. Activity report category wise for auto tipper, compactor, etc.
		d. Summary of the activity at transfer area/processing facility e.g.
		no. of vehicle trips, weight of garbage collected, etc.
		e. Daily, weekly, monthly collection dashboard
		f. Granular information about all mapped routes and waste
		vehicles travelling on the route
		g. Status of waste collecting vehicle (running/idle etc.) in the
		form of chart (e.g. pie chart)
		h. Detailed information about vehicles (e.g. company name,
		vehicle number, detail of driver etc.)
		Total vehicles belonging to PMC/contractors with status of
		vehicles viz. running, idle or standby etc.
		Vehicle type wise status e.g. Tipper, Manual, Compactors etc.
		Scheduled routes of vehicles and deviations.
		Route Adherence Dashboard
		Vehicles routes violations: Total and individual
		GPS Status Dashboard e.g. working, power off etc.
		Vehicles incidents, breakdown and messages
		Department and ward wise separate authentication based on
		vehicle tracking module.
		Primary waste collection from PMC Households and Primary
		Vehicles Dashboard.
		Biometric Public Health worker attendance and street sweeping
		coverage.
		Efficiency of Primary and Secondary Vehicles engaged in various MSW activities.
		The dashboards shall be customizable, where operator
		monitoring the solution can filter out columns/fields required, as





S.No.	Module	Functional Specification
		and when necessary.
2.	GIS Map	The GIS Module in the SWM application will help in monitoring
	Layers	the activities on the Google Maps.
		Licensed Google MAPs should be used for demarcation of the
		PMC area.
		Collect and configure the Geo-Locations as per the project
		requirement.
		Development of GIS system with spatial database and integrate
		with the Data captured above for geographic queries and normal
		data queries.
		Geocoding / surveying of the following components shall be done
		Waste Collection points (POls) & Routes
		Specific transfer areas
		Circle Offices
		Ward offices
		Processing facilities
		<ul> <li>Others (as and when new components get added)</li> </ul>
		GIS Mapping should contain a layer of uniquely identified
		building points with area polygons which will assist in User
		Charges Calculation.
		Another layer of streets and roads must be created which must
		be linked in the software with building points. This will help
		identifying the missed property due to lack of service.
		The assignment of tipper vehicles and public health workers will
		be done in the software for proper monitoring of the MSW
		activities of waste collection, street sweeping.
		GIS MAP layer which also monitor the status of waste collection
		through mapping of building unique identification with the QR
		Codes should be created.
		Assignment of various resources like public health workers,
		vehicles to GIS ward layers should be done on regular basis
		through control room.
		Dynamic Route Management: Ability to create and assign routes
		based on the landmarks and stoppages with option to assign single or multiple vehicles on the route created
	Route	Time Place Movement (TPM) mapping:
	Mapping &	i. Facility to define route and waste collection points on map
	Optimization	ii. All routes and its collection points shall be accurately mapped
	F	(for tabular / map report, analysis)
		iii. Facility to define the schedule for each route and waste
		collection points there in, with respect to its collection in terms of
		start time, end time and grace period if any
		iv. Facility to assign a specific or multiple route to a
		contractor/vehicle / driver
		v. Administration of defined route as per new / updated
		requirement





S.No.	Module	Functional Specification
		Time Place Movement (TPM) Monitoring:
		i. Monitoring the route attendance by designated vehicle in terms
		of in time, out time and duration
		ii. Monitoring of vehicle movement & stopping points with time
		stamps
		iii. Route and collecting points shall be displayed on the city map
		is to be displayed in reports as well as on map with necessary
		available details.
		iv. Through GPS movement, entry/exit and stoppages of vehicle
		shall be monitored
		v. Every collecting point is mapped with the stoppage time
		interval. If vehicle stops at least for defined stoppage time at that
		collection point, it can be assumed that waste is collected from
		that point
		vi. Alert shall be configurable for notifying incidence of missed
		route, missed Pol, on missing time schedule
		System shall have functionality to optimize garbage collection
		route, which can be based on following (but not limited to)
		parameters:
		i. Dynamic creation of geo-fence
		ii. Dynamic allocation of collection points raised by citizens
		iii. Shortest route
		iv. Shortest time
		v. Speed limit restriction
		vi. Traffic volume at different times of the day
		vii. One-way streets
		viii. Turn restrictions
		ix. Obstacles
		System shall have alert generation facility against delays or other
2	77 1 : 1	issues during solid waste pickup duties
3.	Vehicle	Vehicle Tracking System should give a quick and easy view to
	Tracking	know overall fleet status on real time basis. It should display
	System	status information of all vehicles i.e. Running, Idle or Standby.
		The Dashboard view should provide the following information:
		Circle name, Ward Name, Selected integrator Name, Vehicle No,
		Vehicle Type, Current Location & Last Updated Date & Time of
		each vehicle. It should give alert message if GPS device gets
		disconnected from a vehicle. Dashboard should have search
		parameter where different searches i.e. Vehicle Number wise,
		Circle & Ward wise, Running/ Idle / standby vehicle wise and "No communication" wise searches can be done. It should also
		give an indication regarding the running speed of the vehicle i.e.  Normal speed, Alarming speed and above Alarming speed. There
		should be provision to see any vehicle on map.
		Live Status of all the vehicles should available in various views
		like tabular and maps. It should guide the control room to monitor the running, idle, stopped, not-started vehicles in the
		system.





S.No.	Module	Functional Specification
		Information like Circle Name, Ward Name, Vehicle Type, Contact
		Number, Current Speed, Maximum Speed, Average Speed, Trip
		Time, Idle Time, Distance Travelled & Last updated Date & Time
		should be displayed. The live vehicle view also should have
		facility for various alerts i.e. Ignition on / off, Speed status,
		Battery Removal Alert, No Communication from device. In live
		vehicle map view, real time location of vehicle and the path taken
		by the vehicle to reach its current location should be plotted. A
		very important feature of Live Vehicle view should be the user
		can create Landmark i.e. any important point or location name
		w.r.t. the application of vehicle.
		Route replay feature is very important in knowing the vehicle
		movement in a specified period. Here the user should be able to
		select a date and time and can see where exactly the vehicle
		moved in that specified period. There should be various selection
		parameters i.e. Circle Name, Ward Name, Vehicle Number, Date,
		Time and provision for viewing the over speed done and the
		stoppages (as per pre-defined time for each collection point)
		taken by the vehicle. User also should be able to view Route
		statistics like vehicle type, speed violations, total alerts, trip time,
		idle time, maximum speed, average speed and distance travelled
		by the vehicle for that specified period in map view.
		Several Customized MIS Reports should be available: Report on
		door to door collection. In addition, following reports also should
		be available. Daily KM, Distance Report, Event Report, Trip
		Report, Engine Utilization Report, Idle Report, Geo-fence Entry
	** 1 . 1	Exit Report, Collection Point Served / Un-served Report
4.	Vehicle	There should be a provision in the system to report
	Maintenance	breakdown/maintenance of an MSW vehicle. History of
		Maintenance log should be archived for future analysis. The
		system should prompt an alert for vehicle maintenance as per
		the standard schedule provided. This would help the supervisor
		and circle head to know the actual status of the MSW Vehicles
		and take necessary action.
		The real-time breakdown reporting and maintenance activity
		logging will provide information about efficient management of the vehicles.
5.	Door to Door	The QR Code Scanning done public health workers will help the
٥.	Collection	system monitor the percentage coverage of waste collected from
	Monitoring	households in each ward, circles and the whole of PMC area. This
	Monitoring	waste pickup should be shown on the map in real-time basis for
		centralized monitoring.
		Waste collection from the secondary collection point should also
		be monitored by QR Code scanning and image of the cleaned
		area. The image should be saved in the cloud for at least 3
		months for verification.
		The GPS co-ordinates from the MSW vehicles along with QR Code
		scanning will assist the supervisors and monitoring staff to
<u> </u>		scanning win assist the supervisors and monitoring stail to





S.No.	Module	Functional Specification
		provide the percentage coverage in terms of waste collection.
		QR Code on each property should be linked with the citizen app
		and the citizen should receive notification once the waste is
		picked up and scanned at the property. In case of un-appropriate
		pick-up, citizen can raise a complain using the citizen app
		instantaneously.
6.	Attendance	All the Public Health workers and hierarchy must be updated in
	Management	the system on a regular basis. This would include all the master
	System	information that will be provided by the PMC.
		All the public Health workers with their roles will be mapped in
		the GIS system.
		The system must generate alert in case of any deviation in the
		attendance of the public health workers which would affect the
		MSW operations of the particular area. This would help the
		supervisors and circle in charge to take necessary action.
		Biometric attendance of all the public health workers will be
		updated in the cloud.
7.	Complaint	Complain/Grievance registration through Toll free number and
	Redressal	call center executive can be done in this system. The complaint
	System	will be tagged with circle, ward. Based on the address location
		the complaint will be forwarded automatically to the supervisor
		on his mobile app.
		Complains will automatically integrated from the citizen app
		module which will follow the same resolution step. The
		resolution process will be finalized by the department at the time
		of implementation.
		Application should generate a system-based complaint reports
		and their status and such report should be generated on daily
		basis.
		These system reports will enable the PMC SWM Department to
		assess the category of complaints and will give valuable inputs in
		addressing the waste management related issue.
		The MIS report of the complaint resolution status must be auto
		mailed to the respective in charge for monitoring purposes.
		The complaint unique id will be generated automatically and sms
		will be sent to the customer for tracking the status of the
		complaint.
		Full redressal workflow management system with auto
		escalation of grievances as per set time period & escalation
		hierarchy.
		Integration with Simple Mail Transfer Protocol (SMTP) to
		facilitate notifications to involved stakeholders/ parties through
_		email.
8.	Control room	Analytics Dashboard along with Map Visualization should be
	Real Time	provided to the control room supervisor, which would provide
	Monitoring	the number of vehicles, Attendance of the public health workers,
		number of served areas with % of waste collection completed.
		The control room supervisor can search a circle, ward based on





S.No.	Module	Functional Specification
		filter. This would help monitor the situation and analyze the data
		in real time.
9.	Admin	Should have facility to add, edit and delete the user. The rights of
		information to be viewed by the user can also be controlled by
		the admin. The admin can assign vehicles to ward, circle and
		Selected integrator.
		The software solution shall have facility to register users by
		capturing necessary user details. Admin can create roles and
		hierarchy as per the need of the organization and user can be
		mapped accordingly. The administrator shall have feature to
		reset password for users.
		The administrator can define specific privileges for a user role
		(The solution shall have capability to show/hide based on user
		roles).
		Admin can manage contracts, i.e create/edit/delete contracts with details of SLA, payments and penalty
		The admin can maintain various masters like POI, Parking, Waste
		Collection Points, GIS Geo-Fencing, Device Vehicle Resource
		Mapping etc.
		Create & Manage masters pertaining to circle, wards, routes,
		vehicles. Contractor Management is an essential part of the
		system.
		Mapping of circle, ward with contractor and vehicles. Mapping
		vehicles with drivers, parking and various vehicles POI.
		The admin can manage allowed threshold (delay) for garbage
		collection coverage for specific vehicle/group of vehicles.
		Upon specific user request, the admin user/manager shall have
		functionality to revert/alter any transactional record. Necessary
		audit trails shall be maintained in the solution.
		Create/Edit/Delete group and subgroup for various parameters
		like vehicle type, circle & wards, contractors, etc.
10.	MIS Reports	Customized MIS reports must available for all the modules as per
		the needs of the PMC. Reports can be generated on type-wise,
		ward wise, circle wise for any period. Standard reports required
		for Daily, Weekly, Monthly basis should be generated in xls and
		pdf formats.
		The system shall have role-based view for viewing the dashboard
		and reports. (It shall also include the parking spot, fuel station
		and transfer station which are tagged to a vehicle; in case the
		same are located outside the ward to which the vehicle belongs)
		Ward (Default view) Circle (Default view)
		Verification Report & Exception reports to be developed
		Date wise, Circle wise, Route wise, collection points served, not
		served
		Date wise, Circle wise, Route wise number of vehicles (with
		vehicle details) used
		venicie actalisj uscu





S.No.	Module	Functional Specification
		Date wise, Circle wise, Route wise list of vehicles transferred /
		not transferred garbage to processing facility
		Date wise, Circle wise, Route wise details of garbage collected
		Date wise, Circle wise, Route wise list of vehicles violated their
		routes
		Vehicle wise, date wise vehicle in operation/not in operation
		details
		Date wise, vehicle wise number of trips at processing facility
		Date wise, Circle wise list of vehicles with nonfunctional GPS
		Display of real time/archived vehicle traversal route on the map
		(Scheduled Actual)
		Display of Geo-fence, Geo-locations on the map
		Vehicle summary report (vehicle id, first and last collection
		points, Collection start time and end time for the day, Total
		distance travelled, Total no of speed violations, Maximum speed
		attained throughout journey, Graphical as well as tabular display
		of total collection points served, and points not served by
		selected vehicle for any particular day
		Show all collection point with their scheduled serve time
		Stoppage Report (Halt Start Time, End Time, Halt Location, and
		total Halt time for any selected vehicle for specific date)
		Vehicle History (Total distance covered, alerts, violations,
		average speed, high speed between start and end date (on
		weekly and monthly basis per Vehicle)
		Payment report for Contractors (Based on weight/trips per
		vehicle per day)
		Penalty report for Contractors (Based on weight/trips per
		vehicle per day)
		During the implementation of the project; the dashboard and MIS
		reports shall be developed in discussion with BBMP to enable
		trouble shooting, on field intervention, data driven performance
		monitoring and decision making.
11.	Data Storage	GPS data should be stored for at least 1 year.
12.	IoT Gateway	The SI should implement efficient technology for handling large
		volume of data. The system should be capable of handling at least
		5 million data per day with distributed minimum 3 node cluster
		architecture. The system should have capability to handle 200
		concurrent connections per second with processing of 200 events
		per second.
		The IOT core should have device registry capability, Pub/Sub
		broker and should support protocols like Mqtt, Http, Web-
		sockets.
		The system should have real-time stream processing like spark
		stream processing for real time dashboards.
		The database used should be Cassandra with distributed. For
		storing SQL data warehousing standard sql database engines
		should be used.
		per second. The IOT core should have device registry capability, Pub/S broker and should support protocols like Mqtt, Http, Websockets. The system should have real-time stream processing like stream processing for real time dashboards. The database used should be Cassandra with distributed. F storing SQL data warehousing standard sql database engin





S.No.	Module	Functional Specification
		The system should have future integration capabilities with
		Business Intelligence applications for dynamic reporting.

# 2. Citizen Grievance Redressal Mobile Application (Android/iOS) (Turnkey item)

S.No.	Module	Functional Specification
1.	Complaint	Citizen can register complains about waste pickup and related
	Registration	issues
		Complain Status and update
		Toll free number integration and app dialing to customer care.
		SMS and App notification fo>=7and <9 (12 marks)
		>=9 (15 marks)
		r complain number and status update.
2.	Track Waste	Notification of waste pickup on the citizen application
	Pickup	Track vehicle on the map assigned for pickup in the ward/area
		Know the waste pickup schedule in an area.
3.	Waste	All the relevant information about door to door collection, street
	Collection	sweeping, supervisors and vehicles responsible.
	Information	
4.	Public	List all the public convenience depending on the location of the
	Utilities	citizen.
5.	User Profile	Authentication using mobile number and OTP
		Guest Login with restricted access
		QR Code and user info-based profile creation
		Multiple user login for same household
6.	Social	Integration of PMC social media handles in the app like facebook,
	Integration	twitter etc.
7.	Integrations	User Collection Charges integration
		UPI and Payment gateway integration
8.	Technologies	Android 6.0+ and iOS – native application
		Offline support using firebase database support
		Syncing of firebase database with sql database.
		Google Maps support for tracking vehicles

## 3. Mobile App for Supervisors and Drivers (Turnkey item)

S.No.	Module	Functional Specification
1.	Vehicle	The supervisor and circle head can track the live location of the
	Tracking	vehicle assigned to them for operation in a ward or sector.
		Route of the vehicle with replay feature and stoppage points.
		Notify and alert unscheduled or long stoppage to the supervisor.
2.	Attendance	View the daily, weekly and monthly attendance report of all the
		public health workers reporting to the supervisor/circle head.
3.	Complain	All complains of a ward and circle will be automatically notified to





	Management	the supervisor and circle head.
		The supervisor will close complains from the app after taking
		necessary action and feedback from the citizen.
		Complain Dashboard and Reports on the mobile app will help
		monitor the status of complains in the ward on the daily basis.
4.	Door to Door	This feature will be provided to the waste collectors who will scan
	Service	the QR code after pickup of the waste from a location. This
		information will be sent to the control room MSW software for
		real-time reporting.
5.	Secondary	The Secondary waste collection through compactor and Hyva will
	Service	be monitored by scanning of QR code at the secondary point.
		The image of the cleaned site will also be clicked in the app and
		uploaded in the cloud for verification through MSW application.
		The image will be geo-tagged and shown on the map with image
		for monitoring purposes.
6.	Dashboard	Cleanliness of a ward, circle and city can be monitored from the
		app.
7.	Technologies	Android 6.0+ native application
		Offline support using mobile real-time database support
		Syncing of firebase database with sql database.
		Google Maps support for tracking vehicles

# 4. Weighbridge Desktop Application (Turnkey item)

S.No.	Module	Functional Specification
1.	Dumpsite Vehicle Entry	The Secondary vehicles which collect waste from the City enter into the dumpsite for waste processing. The Vehicle should be weighed on the weighbridge at the entry and exit.
		Module must enable tracking of vehicles' inward/outward movement; weight of solid waste transported through the SWM Facilities and transfers the same to the central control center without any ability to change the data locally.
		Module must also enable the highlighting of the routes covered by the compactors/ tippers/ other vehicles involved through GIS mapping
2.	Vehicle	Vehicle Master Creation, Updating by admin login
	Management	Types and category of vehicle
		Automatic vehicle number detection based on windshield RFID tags
3.	Integrations	Digital Weighbridge integration for automatic weight reading
		CCTV integration for taking image of the MSW vehicles
		Boom Barrier Integration for automatic door opening and closing through software
4.	Data Storage	Offline capability and sync weight data in cloud storage whenever network is available.
		All the data shall be stored locally for a min. period of 60 days including the video and images captured. Internet connectivity & storage to be provided by SI.
5.	Weighbridge	Slip is generated automatically once the vehicle exits the dump-yard.





S.No.	Module	Functional Specification
	Slips	
6.	MIS Reports	Daily, Weekly MSW weight (tonnage) report
		Missed vehicle entry report
		Unauthorised Vehicle entry report
		Vehicle Wait time analysis report
		Daily, Weekly and Monthly trip report
7.	Web Analysis	Analytics Dashboards like fuel vs tonnage, vehicle vs trip
		Online Report for weighbridge slips with export options like xls and
		pdf
8.	Technology	.net/Java application with MS access database
		Application must enable integration with SMS gateway to facilitate
		update of status as well as notification through SMS. SI shall provide
		the SMS gateway. The cost towards this shall be part of Price
		Component of OPEX.

# 5. Toll free number GSM Gateway with Helpdesk Software with server (Turnkey item)

S.No.	Module	Functional Specification
1.	Toll Free	The Citizen grievance redressal setup needs to have toll free
	Number	number facility with minimum of handling 10,000 calls from the
		PMC area. Tollfree number if not provided by the PMC must be in
		the scope of the SI. This number must be purchased in the name of
		PMC with prior approval from the authority.
2.	GSM Gateway	8 port VOIP GSM gateway with supporting 8 channels
		Ethernet Interface: 2 LAN 10/100M
		GSM: Quad-band 850/900/1800/1900MHz
		Up to 8 Concurrent Calls
		Flexible Dial Rules and Manipulation Rule
		Voice Activity Detection (VAD)
		Call Progress Tone Generation
		Call Waiting and Call Forwarding Feature
		SIP Registration and Trunk group management
		Web based configuration option
		Various call statistics and call log
3.	Call Centre	Should support skill-based routing and it should be possible to put
	Dialer	all
	Application	the agents into a single skill group and different skill groups
		Automatic Call Distribution (ACD) support routing of incoming
		calls based upon caller input to menus, real-time queue statistics,
		time of day, day of week, ANI,
		dialed number etc.
		ACD should support call routing based on longest available agent,
		Circular agent selection algorithms.
		ACD should support the playing of customizable queuing





S.No.	Module	Functional Specification
		announcements based upon the skill group that the call is being queued to, including announcements related to position in queue and expected delay.
		Agents should be able to chat with other Agents or supervisor from the Agent desktop software
		Supervisor should be able to see the real-time status of agents; supervisors should be able to make agent ready or logout from the supervisor desktop
		Should support Queuing of calls and playing different prompts depending on the type of call and time in the queue. In future if required, the ACD should support active and standby server mode, where the server can be put in DC and DR.
		CRM integration with the proposed SWM software and mobile application.
		Call Record should be maintained for at least a year on the local server with continuous backup on the cloud.
		Interactive Voice Response should be possible
		Live/Current Agent Monitoring with Agent Call intervention. Call Transfer and call retrieval facility.
4.	IP Phones	Operating Temp – 0 to 40 degrees centigrade
		Height – 8"
		Width – 10.5"
		Depth – 6"
		Power – 100 to 240V AC, 50 to 60 Hz
		Cables support CAT6 & CAT5

# 6. QR Code on property

CN	C.N. M. July	
S.No.	Module	Functional Specification
1.	Туре	Acrylic, U-PVC
2.	Print	Print QR code with two logo (PSCL & PMC) and QR code
3.	Size	110mm x 60mm
4.	Fixing Details	Shall be able to fix with two screws and adhesive
5.	Operation	0 to 60 degrees
	Temp.	
6.	IP	IP 65
	Classification	
7.	Adhesive	3M
8.	Weather	Heat, dust proof & waterproof
9.	Installation	Review of existing situation and verification of all available data
		from PMC/PSCL.
		QR Code will be screwed at each property with geo-tagging images
		in the PMC area.
		Database structure design for property/holdings to keep all
		records like images and attributes should be collected.
10.	GIS Mapping	Geo-Tagging and Geo-fencing with GIS Mapping of each property of
		PMC.





S.No.	Module	Functional Specification
		All the GIS boundaries like wards, circles will be provided by the
		PMC and shall be integrated with the system.
		The PMC/PSCL has approx. 2.26 lac data that needs to verified and
		integrated in the existing system.
11.	Attributes to	Attributes of the property - Building Type, Number of Properties in
	be collected	the Building, Property Type and occupancy status mapped with QR
	during QR	Code at each property.
	Code	
	Property	
	Tagging	
		Images of the Building and Properties along with QR Code Tag on
		the Property.
		Floor wise property details
		Digital photograph of each property within the PMC area and its
		linking with respective unique property ID and QR Code in the
		database
		Each Property should be mapped with Waste collection vehicle
		which is serving the given property with approx. schedule.
		Property connecting road- road type, road width and its linking
		with the property.

# 7. Handheld Mobile Devices

S.No.	Parameters	Technical Specification
1.	Туре	4G and above
2.	Sim Type	SS
3.	OS Version	Android 5.1 and above
4.	Chipset	Qualcomm
5.	CPU Ghz	1.2   Quad
6.	RAM	2 GB and above
7.	ROM	8 GB and above
8.	Size	5.5" and above
9.	Resolution	1024 x 600
10.	Screen Type	TFT
11.	Camera Rear	5MP autofocus
12.	Battery	3600 mAh
13.	GPS	GPS, AGPS
14.	Wi-fi	802.11 b/g/n 2.4 GHz
	Connectivity	
15.	Sensors	Accelerometer

#### 8. Data SIM Cards

S.No.	Parameters	Technical Specification	
1.	Sim Type	Minimum 4G sim cards with 2 GB data per month.	





#### 9. Wall mounted Biometric Device

S.No.	Parameters	Technical Specification	
1.	Storage	Fingerprints templates – 4000	
	capacity	Face Capacity – 3000 (1: N), 3000 (1:1)	
		Card Storage – 10000	
		Transaction Storage – 1,00,000	
		Card Reader- inbuilt proximity card reader	
		CPU- 800 Mhz 32-bit Microprocessor	
2.	Fingerprint	500 DPI Optical Sensor	
	sensor		
3.	Display	4.3-inch touch display	
	LED indicator	Green/red	
4.	Communicati	TCP/IP, USB, WIFI, GPRS	
	on		
5.	Push Data	Yes	
6.	Battery	2000 mAh	
7.	Card Reader	Mifare/HID Prox	
8.	Attendance	Web based for more than 5000 users with automatic real-time	
	Compatible	sync to cloud server. No manual data extraction process needed.	
	Software		

# 10.CCTV (PTZ cameras) with DVR

S.No.	Parameters	Specifications	
1	Image sensor	1/2.5" progressive scan RGB CMOS or better.	
2	Total sensor pixel	12MP @ 25/30 fps or better	
3	Effective Pixel- Resolution 360°	Min 2640 x 2640 (7MP) @ 25/30 fps	
4	Lens- 360°	1.8mm fixed focus IR Corrected Single sensor lens or better	
5	Minimum Illumination	Color: 0.6Lux @ 30 IRE B/W": 0.2 or better	
6	White Balance Range	2,500° to 10,000°K	
7	Signal to Noise Ratio	>50 dB	
8	Compression	Minimum H.264/H.265	
9	Wide Dynamic Range	90db or more	
10	Day/Night Camera	Auto day/night configuration.	
11	Number of Streams	3 streams fully configurable frame rate and resolution.	
12 Shutter speed 1/30 to 1/10000		1/30 to 1/10000	





S.No.	Parameters	Specifications	
13	Tamper detection	ON/OFF	
14	Streaming	Camera should support unicast and multicast streams.	
15	Edge Storage	Support for 128 Gb SD Card.	
16	Ethernet, Network protocols	10/100 Base-T, autosensing, half/full duplex. IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/ RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, MIBII), 802.1x,	
17	Discovery interface	OEM interface to detect the cameras automatically and configure network settings.	
18	De-fog	Defog automatically adjusts parameters for best picture in foggy or misty Scenes	
19	Power requirement	Power supply Poe and Local power supply for camera	
20	Operating Temperature	-10 C to 50 C Degrees.	
21	Operating Humidity	10 to 90% RH non-condensing.	
22	Regulatory Approvals	UL, EN, · CE, FCC, · ONVIF Profile S, Profile G Conformant	
23	DVR/NVR	8 Channel video input with storage of about 1 TB	

## 11. Computer, UPS(Workstations)

11. Computer, or 5 (workstations)			
S.No.	Parameters	Specifications	
1.	Processor	Intel Core i5 7th generation Processor	
2.	Chipset	Compatible Chipset on Intel motherboard	
3.	Memory	8 GB DDR4 RAM upgradable to 16 GB	
4.	Storage	500 GB 7200 Serial ATA HDD or higher	
6.	Monitor	47 cm (18.5 inch) TFT LED Digital Colour Monitor, TCO' 06 certified	
	Monteon	monitors	
7.	Bays	Min. 3 nos.	
8.	Keyboard	OEM USB Keyboard	
9.	Mouse	Two button USB Optical Scroll Mouse	
10.	Cabinet	Small Form Factor	
11.	I/O Ports	One Serial Port, 1 RJ45 port for Gigabit Ethernet, min. 2 USB3.0 ports in the front, min. 4 USB ports at the back, Headphone (front), Microphone(front), Line in, Line out, VGA Port	
12.	Network Features	10/100/1000 on board integrated network port	
13.	Graphic	2 Gb Graphics	
14.	Slots	Minimum 1 * x16 PCI Express, 1 * x1 PCI Express	
15.	Multimedia	Integrated Audio and Graphic Controller	
16.	Preloaded Software	Windows 10 Professional or latest With OEM recovery partition	
17.	Antivirus	5 years Antivirus	





#### **12.Internet connection**

S.No.	Parameters	Technical Specification	
1.	Internet	(Lease line 6 Mbps/10 Mbps) annual /Internet Data Card at 7	
	connection	locations	

# 13. Monitoring LED TV (55 inch)

	Tollitometering LLD 17 (65 men)		
S.No.	Module	Technical Specification	
1.	Technology	LED Display	
2.	Screen Size	55"	
3.	Resolution	3,840 x 2,160 (ULTRA HD)	
4.	Response Time	Up to 9 ms (GTG)	
5.	Connectivity	HDMI, Audio, USB 3.0, Digital Audio Out, RF, External Speaker out, Headphone Out, HDMI/HDCP, RS232C, RJ(Ethernet)	
6.	Control	IR Remote Control	
7.	Power Supply	100-240V~, 50/60Hz	
8.	Typical / Smart Energy Saving	125W (Typ) / 90W(SES) or Less	
9.	Operation Temperature	0 °C to 40 °C	
10.	Operation Humidity	10% to 80%	
11.	Warranty	5-Year comprehensive on-site OEM Warranty from the date of installation	

#### 14.IP Phone

S.No.	Module	Technical Specification	
1.	IP Phones	Operating Temp – 0 to 40 degrees centigrade	
		Height – 8"	
		Width - 10.5"	
		Depth – 6"	
		Power – 100 to 240V AC, 50 to 60 Hz	
		Cables support CAT6 & CAT5	

#### 15. Vehicle Tracking Device (GPS devices)

Torveniere Trucking Device (ar 5 devices)			
S.No.	Parameters	Technical Specification	
1.	GSM Frequency	850/900/1800/1900 Mhz	
2.	GPRS	Class 12, TCP/IP	
3.	Memory	32+64 MB	
4.	Receiving Sensitivity	Class IIRBER2%(-106dBm)	
5.	GPS	Quectel L89	
6.	Location accuracy	<10m	
7.	Tracking Sensitivity	-163dBm	
8.	IP Rating	IP 66	





# 16.RFID Readers with Pole Mount at Weigh Bridge

S.No.	Parameter	Specifications	
1	Transponder Protocol	EPC Global – Gen 2 (ISO 1800-6C)	
2	Antenna	Integrated mono static or Bi-static or External	
3	RF Power Output	From 10 dBm to 30 dBm (1 W), +/-1 .0 dBm accuracy	
4	Frequency	865-867 MHz or Any other frequencies approved by WPC India	
5	Data Control	Industrial port: 10/100 Base-T Ethernet interface, Serial RS232	
5	Interface	port/ GPRS.	
6	External DC Power	10 - 30 VDC supply voltage.	
7	Maximum DC power	up to 40W	
8	Operating temp.	From -5°C to +50°C	
9	Storage Temperature	From -40°C to +70°C	
10	TAG Buffer	More than 50,000 tags	
12	Minimum TAG Read distance	Up to 10m	

## 17. Windshield RFID Tags

S.No.	Parameters	Technical Specification
1.	Operating Frequency	840-960 MHz EPC global Class 1 Gen 2
2.	Protocol	ISO/IEC 18000-6C compliant
3.	Read Distance	>10m
4.	Туре	Alien Higgs-3
5.	Memory	512 bit
6.	IP Rating	IP 65
7.	Dimension	30mm x 12 mm
8.	Material	PVC
9.	Mounting	3M Adhesive





#### 18. Boom Barrier

S.No.	Parameters	Technical Specification
1.	Length of Boom	2m (minimum)
2.	Opening Time (Up/Down)	6s
3.	Ingress Protection Degree	IP54
4.	Mode	Automatic/Manual
5.	Auto-Closing time	1-80s
6.	Dimension (in mm)	268 x 348 x 1050
7.	Arm Material	Aluminum
8.	Operating Temperature	-20 to +50 degrees
9.	Incorporated Control Panel	3 push buttons. STOP/UP/DOWN to control the motor
10.	Input Interface for	Photocell, air switch, loop detector
11.	Output Interface	Lamp
12.	SMPS Input	AC 220V/110V, 50 Hz/60 Hz
13.	Motor Power	90W, 220V AC

#### 19. Dot Matrix Printer

S.No.	Parameters	Technical Specification		
1.	Pins	9 pins		
2.	Print Speed (cps)	476 cps @ High Speed Draft 10 cpi		
3.	Input Buffer	128 kb		
4.	Paper Handling	Paper feeder: optional (single bin) Tractor feeder: Pull		
5.	Paper Path	Tractor. (Front or Rear In, Top Out)		
6.	Interfaces	Standard: USB (ver.1.1) I/F Type B I/F Level 2 (Option)		
7.	MTBF (hrs. at 25% duty cycle)	12000 РОН		
8.	Copy Capability	1 original + 4 copies always		
9.	Life of Print head (million characters)	200 Million Strokes/Wire		
10.	Black Ribbon Life (million characters)	12 million characters		

# 20.Static Digital Weighbridge

S.No.	Parameters	Technical Specification		
1.	Weighbridge	25MT X 4 Load Cells = 100 MT		
1.	Capacity	23M1 X 4 Load Cells – 100 M1		
2.	Weighbridge	Pit-less with approach ramps on both sides and non-skid type		
۷.	Construction	steel plates		
3.	No. of Load Cells	4(min)		
4.	Material Handled	Garbage Trucks (in general)		
5.	Platform Size	9m X 3m		





S.No.	Parameters	Technical Specification	
6.	Weighing Console	Microprocessor based with suitable memory for storing data of 90 days with 100 trucks/day transactions.	
7.	Corrosion Allowance for fabricated items	3 mm	
8.	Material of Construction	IS 2062 for fabricated structure/component	
9.	Control Room	The Control Room needs to be constructed besides way bridge with proper furniture (2-3 persons) and window air condition (1.5 ton). The room will be airtight with proper operator furniture and computer system.  Room Size- 10' X 10'	

## 21. All-in-One Printer

S.No.	Parameters	Technical Specification
1.	Printer Type	Multi-function
2.	Printing Method	LaserJet
3.	Printer Functions	Print/Copy/Scan
4.	Printing Output	Duplex Monochrome
5.	Duty Cycle-	Up to 10,000 pages
	Monthly	
6.	Print Speed	28 ppm
7.	Output Tray	Up to 100 sheets
	Capacity	
8.	Input Tray	150-sheet input tray 10-sheet priority tray
	Capacity	
9.	Interface	USB 2.0, Fast Ethernet 10/100
10.	Print Resolution	600 X 600 dpi and above
11.	Compatible	Windows/Linux/MAC
	Operating system	
12.	Scan: Optical	600 x 600 dpi and above
	Scanning	
	Resolution	
13.	Copy: Maximum	Up to 99 copies
	Copies	





# 22. ICT Services (Part of OPEX)

S.No.	Parameters	Technical Specification	
1.	Cloud Server	Distributed Scalable Multi-node Cloud Infrastructure	
		Minimum 5 Node Cluster with following	
		configuration of single node:	
		Minimum RAM 8 GB	
		CPU 4 Core	
		• SSD Storage - 160GB	
		<ul> <li>Network In – 40 Gbps</li> </ul>	
		<ul> <li>Network Out – 5000 Mbps</li> </ul>	
		• Transfer – 5TB	
2.	SMS Gateway	Minimum requirement is 50K SMS per month	
3.	Mobile Notification Gateway	Minimum requirement is 200K per month	
4.	Helpdesk Contact Centre	Per year	
	Application License		
5.	GIS Map License (Google Maps)	Per year	
6.	HQ connectivity charges-	broadband 10 mbps per year	
7.	Circle connectivity charges-	broadband 6 mbps per year at 7 locations	
8.	2400 Nos. Data Sim Cards	4G	

# 23. Manpower Deployment (Part of OPEX)

S.No.	Role	Numbers	Minimum Qualification and experience
	Project		• Graduate/B.E. / B. Tech Computer Science / IT. + M.B.A.
	Coordinator		(preferable)
1		1	• 6+ Years of Experience; with 2+ years of Experience as
			Project Manager
			2+ Years of experience in SWM Solution Implementation
	SWM		• B.E. / B.Tech. Computers Science / M.C.A.
2	Expert	1	5+ Years of Experience as a programming for Vehicle
			tracking solutions / RFID solutions/SWM.
2	Support	10	Graduate /Diploma Holders with experience of GPS, RFID
J	Engineers	10	etc.
1	Call Centre	6	Graduate / Diploma Holders with experience of Call center
4	Executive	6	





Solid Waste Management System in Patna Municipal Area under Smart City Mission	Smart Ci
	*028 11103041
SECTION VI : BILL OF QUANTITIES (BOQ)	





#### **PREAMBLE**

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract and Technical Specifications.
- 2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
- 3. PSCL reserves the right to increase or decrease items, services & resources during the tenure of the contract. Payment shall be made as per actual item used and rate quoted in this bid.
- 4. The rates and prices tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all licences, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. The bidder should not charge for any separate license fees to PSCL internal and external users for using the software solution.
- 5. The rates and prices shall be quoted entirely in Indian Currency.
- 6. A rate whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work. The quoted prices should be inclusive all .The bidder needs to account for all taxes in the Invoice submitted.
- 7. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work. The Bidder needs to provision for all costs required to run the application for the entire duration of the contract.
- 8. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation (including the technical specification provided) shall be made before entering rates or prices against each item in the Bill of Quantities.
- 9. The method of measurement of completed work for payment shall be in accordance with the specification issued by the department time to time.
- 10. Errors will be corrected by the Employer for any arithmetic errors as provided in Instructions to Bidders.





#### **Table 1 - Total Price Summary**

(We hereby submit our best offer for "System Integrator for Design, Development,Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System in PatnaMunicipal Area" under Smart City Mission)

Sl.	Head	Amount	Amount
No.		(Rs. in figure)	(Rs. in words)
1	"System Integrator for Design, Development, Implementation and Operation & Maintenance of Intelligent Solid Waste Management System in Patna Municipal Area" under Smart City Mission.  (DLP of one years and O&M of Five years (inclusive of all taxes, levies, duties, etc. as applicable)		

Note: This price will be final based upon which L1 will be decided. In case of any difference between amount in figure and words, the amount in words will prevail. In the event of a difference between the arithmetic total and the total shown in the financial proposal, the lower of the two shall prevail.

Table2 - CAPEX (Item-wise including turnkey items)

S.No.	Component	Quantity	Unit Rate with Tax	Total Amount with Tax
A	В	С	D	Е
1	SWM Software Applications	1		
2	Citizen Grievance Redressal Mobile Application (Android/iOS)	1		
3	Mobile App for Supervisors and Drivers	1		
4	Weighbridge Desktop Application	1		
5	Toll free Number, GSM Gateway and Helpdesk Software with server	1		
6	QR Code on all properties in PMC area	340,000		
7	Handheld Mobile Devices	1200		
8	Data SIM Cards(4G)	2,400		
9	Wall mounted Biometric Device	75		
10	CCTV (PTZ cameras) with DVR	2		
11	Computer, UPS(Workstations)	12		
12	Internet connection (Lease line	8		





S.No.	Component	Quantity	Unit Rate with Tax	Total Amount with Tax
	6Mbps/10Mbps) annual /Internet Data Card			
13	Monitoring LED TV (55 inch)	8		
14	IP Phones	4		
15	Vehicle Tracking Device (GPS devices)	1,125		
16	RFID Readers with Pole Mount at Weigh Bridge	2		
17	Windshield RFID Tags for Compactor Vehicles	28		
18	Boom Barrier	1		
19	Dot Matrix Printer	1		
20	Static Digital Weighbridge	1		
21	All-in-One Printer	1		

Table 3 - OPEX (for 5 years 0&M period)

S.No.	Component	Indicative Quantity	Unit Rate with Tax	Total Amt with Tax
A	В	С	D	E
1	SMS Gateway, Notification Gateway (50000 SMS per day)	1		
2	Helpdesk Contact Centre Application License	3		
3	Cloud Server Hosting annual for 1 year (till ICCC data centre is setup)	1		
4	GIS Map License (Google Maps) per year	1		
5	HQ connectivity charges- (broadband 10 mbps) for 1 year	1		
6	Circle connectivity charges-(broadband 6 mbps) per year for 7 locations	6		
7	Data Sim Cards (4 G)	2400		





Table 4 - Manpower Cost (for 5 years 0&M period)

S.No.	Component	Indicative Quantity	Unit Rate with Tax	Total Amt with Tax
A	В	С	D	F
1	Project Coordinator	1		
2	MSW Monitoring Executive	1		
3	Call Centre Executive	6		
4	Operational Supervisors	10		

#### Note:

- 1. Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the bill of quantities.
- 2. Unit rates and prices shall be quoted by the bidder in Indian rupee.
- 3. Where there is a discrepancy between the rate in figures and words, the rates in words will prevail. In the event of a difference between the arithmetic total and the total shown in the financial proposal, the lower of the two shall prevail.
- 4. Where there is a discrepancy between the unit rate and the line item total, if resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern.



# System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid Waste Management System in Patna Municipal Area under Smart City Mission



ς	F	CTI	0	N	V	H.	FC	RI	<b>V</b> S	&	A l	NN	FX	URES	
u	100		<b>W</b> .		w			<i>,</i> , , , ,	VI.	CX.		1 24 1 24			





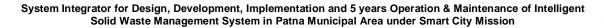
#### **Annexure-1: Technical bid checklist**

SI#	Checklist Items	Compliance (Yes or No)
1.	Technical Bid Covering Letter Ref: Annexure 2	
2.	Cost of Bid Documents/RFP Fee of Rs 10,000/- [Rupees Ten Thousand] only in form of unconditional Demand Draft (Non Refundable) in favour of Managing Director, Patna Smart City Ltd, payable at Patna.	
3.	Proof of online payment of e-proc bid processing cost for Rs.17,700/- [Rupees Seventeen Thousand Seven Hundered] only (Non Refundable) to BELTRON	
4.	Brief profile of the company and name, designation, address, mobile number, fax, email, etc. of primary & secondary contact persons. Also refer Annexure 3	
5.	Earnest Money Deposit of Rs 22,62,000/- (Rupees Twenty Two Lakh Sixty Two Thousand) only (Refundable) in the form of unconditional Bank Guarantee, DD of Scheduled Bank; Post Office Term Deposit/FD/NSC to be pledged in favour of Managing Director, Patna Smart City Ltd, payable at Patna. Also refer <b>Annexure 3</b>	
6.	Certificate of Incorporation/ registration in proof that the firm or company is registered/incorporated in India under the (Indian) Companies Act 1956/2013 and is operational for at least for 3 years in the IT/SWM business as on date of bid submission, for Companies with Indian Origin. (Memorandum and Articles of Association can be included, if considered necessary). Ref: <b>Annexure 4</b>	
7.	Self declaration that the bidder is a single business entity/ sole bidder and the bidding agency is not a consortium or Joint Venture.	
8.	Audited statement for last 3 financial years viz. 2016-17, 2017-18 & 2018-19 of the bidder from the operations from IT/SWM business. Ref: <b>Annexure 5</b>	
9.	Certificate from the Chartered Accountant/ statutory auditor/ Company Secretary clearly specifying that the Net Worth for the last 3 financial years 2016-17, 2017-18 & 2018-19 is from IT/SWM.	
10.	Certificate for Project Execution Experience with enclosures (most important being the certificate from client) i.e. True/ Photo Copy of Work Completion Certificate of all software solution based project (Software/Data Centre/ Disaster recovery/ Cloud services/ Intelligent SWMS or the like) as a prime Agency/ Contractor in any Government organisation/ ULB starting 2016-17, with minimum value of 50% of estimated value of contract (experience and resources as a Sub-contractor's shall not be considered) Ref: Annexure 7	
11.	Copy of valid GST registration certificate and PAN	
12.	A copy of <b>any one</b> of the following certification valid at the time of bidding, duly stamped and signed by the issuing Authority:  • ISO 9001  • ISO 27001(ISO 27017 and ISO 27018)	





SI#	Checklist Items	Compliance (Yes or No)
	• ISO 20000-1 • ISO 22301 • SOC 1 and SOC 2	
13.	Self declaration from the bidder that as on date of submission of bid, the bidder is <b>not black-listed/debared/terminated</b> by any Central/State Government Organization/Department/ PSU in India. Ref: <b>Annexure 6</b>	
14.	Equipment Detail (whether they are meeting specification or not, with their Make & Model) Ref: <b>Annexure 8</b>	
15.	Manufacturers/ Producers Authorization Form provided on the letter head of the manufacturer of the hardware and software solutions/OEMs proposed, duly signed by a competent authority having the power of attorney to bind the manufacturer. Ref: <b>Annexure 10</b>	
16.	Self declaration that the Bidder that he already have or shall undertake to set up an office in Patna during execution of the project, if awarded, for which the bid is being submitted.	
17.	Certificate from HR of the company that on the date of submission of bid the Bidder has 50 IT/SWM professional staff on its own pay roll for providing IT/SWM related services.	
18.	Power of Attorney of authorized representative as per the format at given in this RFP. Ref: <b>Annexure 14</b>	
19	<b>Overall approach and methodology</b> of the bidder to implement and maintain the Intelligent Solid Waste Management System, which should include detailed understanding of the scope of the work/ project requirement, technical solution, approach & methodology specific to the project, Resource Management Plan and detailed Project Plan with interim milestone & timelines. The comprehensive plan, proposed solution, detailed project schedule, team structure, manpower positioning, implementation methodology, training details, management of the project, list of technology provider etc. together with an undertaking that the proposed system shall be installed, commissioned, implemented complete in all respects adhering to the requirements of RFP. Ref: <b>Annexure 9</b>	
20.	<b>Project Risks Identification and Mitigation Plan</b> related to MSW Operations, Digital Weighbridge Commissioning, Software and Hardware deployment, Integration with external systems and Operation & Maintenance. Ref: <b>Annexure 9</b>	
21.	Certificate Regarding restriction on procurement from a bidder which shares land border with India . <b>Ref: Annexure-18</b>	
22.	Any other document, as specified in the RFP document.	







#### **Annexure-2: Technical Bid Covering Letter**

Date: dd/mm /yyyy

To, The Managing Director, Patna Smart City Limited, Patna

Subject: Request for Proposal (RFP) for "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid WasteManagement System for Patna Municipal Corporation Area".

Ref: RFP No. ...... dated ......

Dear Sir,

With reference to your RFP for "System Integrator for Design, Development, Implementation and Operation & Maintenance of Intelligent Solid Waste Management System for Patna Municipal Corporation Area" I/ We, << name of the undersigned Bidder>>, having read and examined in detail all the bidding documents in respect of Request for Proposal, do hereby propose to provide our services as specified in the bid submitted by us and accordingly submit our Technical Bid and Financial Bid.

It is hereby confirmed that I/we are entitled to act on behalf of our company / corporation / firm / organization and empowered to sign this document as well as such other documents, which may be required in this connection.

I/we understand that our bid is binding on us and also that you are not bound to accept any Bid you receive. This bid is valid for Three Years after opening of technical bid. We shall extend the validity of the bid if required by PSCL. If the quoted brand / model becomes obsolete, we shall replace it with equivalent brand / model.

I/we confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to PSCL, Government of Patna is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its evaluation process. We also confirm that we shall not attract conflict of interest in principle.

#### We hereby **declare** that:

- (a) We hereby acknowledge and unconditionally accept that the PSCL can at its absolute discretion apply whatever criteria it deems appropriate, not just limiting to those criteria set out in the RFP and related documents, in shortlisting of Agency for providing services.
- (b) We have **submitted the EMD** of INR [......] lakhs and **Tender fee** of INR [......] << Financial Instrument details...
- (c) We hereby declare that all information and details furnished by us in the Bid are true and correct to the best of our knowledge, and all documents accompanying such application are true copies of their respective originals.







- (d) We agree to abide by our offer for a period of Three Years from the date of Submission of bid prescribed by PSCL and that we shall remain bound by a communication of acceptance within that time.
- (e) We have carefully read and understood the terms and conditions of the RFP and the conditions of the contract applicable to the RFP. We do hereby undertake to provision as per these terms and conditions and declare that all the services shall be performed strictly in accordance with the RFP documents.
- (f) In the event of acceptance of our bid, we do hereby undertake:
  - (i) To supply the products and commence services as stipulated in the RFP document.
  - (ii) To undertake the project services for entire contract period from the date of signing of the contract as mentioned in the RFP document.
  - (iii) We affirm that the prices quoted are inclusive of design, delivery and discounts etc.
- (g) We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.
- (h) We understand that the PSCL may cancel the bidding process at any time and that PSCL is not bound to accept any bid that it may receive without incurring any liability towards the bidder.
- (i) I/we hereby declare that in case the contract is awarded to us, we shall **submit the unconditional contract Performance bank guarantee** in the form prescribed at Annexure of the RFP.
- (j) I/we hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

We fully understand and agree to comply that on verification, if any of the information provided in our bid is found to be misleading, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

	I	in case of an	v clarifications	please	contact:	email	contact no.	
--	---	---------------	------------------	--------	----------	-------	-------------	--

Thanking you,

Yours sincerely,
(Signature of the bidder)
(Printed Name)
Designation
Seal Date:
Place:
Business Address:





#### Annexure 3: Brief Profile of the Company, Contact persons & EMD details

Sl.	Particulars	Description
No.	1 ar cicular 3	Description
1.	Name of Bidder	
2.	Bidder's Legal status (company/Pvt.Ltd./LLP etc.)	
3.	Main business of the Bidder	
4.	Registered office address	
5.	Incorporation date and Registration number	
6.	GST No.	
7.	PAN details	
8.	Primary Contact Person (Name, Designation,	
о.	address, mobile number, fax, email, etc.)	
9.	Secondary Contact Person (Name, Designation,	
7.	address, mobile number, fax, email, etc.)	
10.	EMD details	

#### **Annexure 4: Valid Certificate of Incorporation.**

For Companies with Indian Origin, Certificate of Incorporation/ registration under **Companies Act 1956/2013** in appropriate format by the issuing authority with proper stamping.

(Memorandum and Articles of Association can also be provided, if considered necessary)

## Annexure 5: Financial Turnover of last 3 years.

The Audited statement / financial turnover of the company has to be provided last 3 financial years viz. **2016-17**, **2017-18** & **2018-19** as per the following table:

Sl. No.	Audited financia	Audited financial statement for last 3 financial years / Annual Turnover *								
	2016- 2017	2017-2018	2018- 2019							

\*Note: Also submit Certificate from the Charted Accountant/ statutory auditor/ Company Secretary clearly specifying the annual turnover is from the operations from Intelligent Solid Waste Management Solutions.





# **Annexure 6: Declaration of Non-Blacklisting/Debarment/Termination** (To be provided on the Company letter head)

To,

# **The Managing Director,**Patna Smart City Limited (PSCL), Patna, (Bihar)

**Subject:** Self Declaration of not been blacklisted; in response to the Request for Proposal for "System Integrator for Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid WasteManagement System for Patna Municipal Corporation Area"

Ref: RFP No dated	
Dear Sir,	

We confirm that our company/ firm, ....... is currently not blacklisted/debared/terminated in any manner whatsoever by any of the State/ UT/ Central Government department/PSU in India on any ground, including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

In case at any stage of biddig/ execution of work, if it is found that our company/ firm was blacklisted /debared/terminated in any manner whatsoever mentioned above by any of the State/ UT/ Central Government department/PSU in India, the contract awarded to our company/ firm may be cancelled.

(Signature of the Bidder)
Printed Name
Designation
Seal Date:
Place:
Business Address:





# Annexure 7: Certificate for Project Execution Experience with enclosures (most important being the certificate from client)

(In Bidding Entity's/Company Letter Head)

This is to certify that < <<<< Name of the Bidding entity .............. has been awarded with < <<<<< Name of the Project as detailed hereunder:

Name of the software solution based project (Software/Data Centre/	
Disaster recovery/ Cloud services/ Intelligent SWMS or the like)	
completed as a Prime Agency/Contractor (not as Sub-contractor) in any	
Government organisation/ ULB starting 2016-17 with minimum value	
of 50% of estimated value of contract.	
Client's Name, Contact no. and Complete Address	
Contract/ Agreement Value of the work (in INR)	
Date of Start of work	
Date of Completion of work	
Current Status of the Project (Completed/Ongoing)	
Percentage of work completed by the bidding entity on the date	
of bid submission	
(Note: Only software solution based activities as sought in the qualification	
criteria to be included)	
Value of Work Completed for which payment has been received	
from the client.	

**Note:** Separate copy for each project needs to be furnished attaching relevant supporting documents, including the work completion certificate issued by the client in order to ascertain the nature of work carried out.

(Authorized Signatory)
Signature:
Name:
Designation:

Bidding entity's name Address:

Seal and Date:





# Annexure 8: Equipment Detail (meeting specification or not, with make & model)

(this includes 12 out of 21 BOQ items, other than software turnkey items)

Sr. No.	Item Description	Whether meeting the Specification or not	Name of Manufacturing Company	Make & Model No.
1	Handheld Mobile Devices			
2	Wall mounted Biometric Device			
3	CCTV (PTZ cameras) with DVR			
4	Computer, UPS(Workstations)			
5	Monitoring LED TV (55 inch)			
6	IP Phones			
7	Vehicle Tracking Device (GPS devices)			
1 X	RFID Readers with Pole Mount at Weigh Bridge			
9	Boom Barrier			
10	Dot Matrix Printer			
11	Static Digital Weighbridge			
12	All-in-One Printer			

**Note:** Technical details and data-sheets should be submitted for each and every equipment mentioned in the table above with. Replacement of make & model shall not be ordinarily accepted.

Name:

In the capacity of:
Signed:
(Duly authorized to sign the
Authorization for and on behalf of)
Date:
[Signature] [Company Seal]





#### **Annexure 9: Overview of Proposed Solution**

Bidders are required to provide overall approach and methodology to implement and maintain the Intelligent Solid Waste Management System, which include, detailed understanding of the scope of the work/ project requirement, Technical Solution specific to the project, Resource Management Plan, detailed Project Plan and its adequacy with interim milestones & timelines. The bidder need to provide comprehensive plan, proposed solution, detailed project schedule, team structure, manpower positioning, implementation methodology, training details, management of the project, list of technology provider etc. and shall give an undertaking that the proposed system will be installed, commissioned, implemented and completed in all respects adhering to the requirements of this RFP.

In addition, Project Risks Identification and Mitigation Plan related to MSW operations, Digital Weighbridge Commissioning, Software and Hardware deployment, integration with external systems and Operation & Maintenance, needs to be furnished.

Robustness and quality related to project should include end to end integrated solution proposed, hardware deployment and integration approach encompassing all solutions, timelines and modalities for implementation in a time bound manner. Project implementation approach or strategy and operations and maintenance plan including comprehensiveness of fall back strategy and planning during rollout and any other area relevant to the scope of work and other requirements of the project should also be provided.

Assessment of manpower deployment, training and handholding plan shall include, deployment strategy of manpower, contingency management, mobilization of existing resources and additional resources as required to execute the entire project.

A Detailed Project Plan covering break-up of each phase into the key activities, along with the start and end dates must be provided as per format given below.

Sl. No.	Activity-wise Timelines									
	Item of Activity	Month wise Program								
		1	2	3	4	5	6	7	8	9
1	Project Plan									
1.1	Activity 1									
1.1.1	Sub-Activity 1									





#### Annexure 10: Manufacturers/Producers Authorization Form

(This form has to be provided on the letterhead of the manufacturer of the hardware and software solutions/OEMs proposed, duly signed by a competent authority having the power of attorney to bind the manufacturer)

Date:					
To, Managing Director, Patna Smart City Limited (PSCL), Patna, Bihar, India					
Subject: Manufacturer's Authorization Form					
Ref: RFP No. <<>> dated <<>>					
Dear Sir,					
We(Name of the OEM) who are established and reputable manufacturers of(List of Goods) having factories or product development centres at the locations					
We hereby extend, our warranty for the hardware goods supplied by the bidder and or maintenance or support services for software products against this invitation for bid by(Name of the Bidder) as per requirements and for the duration of contract as specified in this RFP.					
We also confirm that our offered product will not be end of life for minimum of 6 months from the date of bid submission and the support for such offered product/s will be available for minimum of 5 years from the date of award of contract.					
Thanking you,					
	Yours faithfully,				
	(Signature) For and on behalf of: (Name of the OEM) Authorized Signatory Name: Designation: Place: Date:				





#### **Annexure 11: Anti-Collusion Certificate**

[Certificate should be provided by Bidder and on letter head]

#### **Anti-Collusion Certificate**

We hereby certify and confirm that in the preparation and submission of our Bid for "Design, Development, Implementation and 5 years Operation & Maintenance of Intelligent Solid WasteManagement System for Patna Municipal Corporation Area", Patna against the RFP issued by PSCL, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing, which is or could be regarded as anti-competitive. We further confirm that we have not offered nor will offer any illegal gratification in cash or kind to any person or organization in connection with the instant bid.

(Signature of the Bidder)

Printed Name

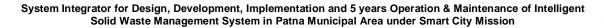
Designation

Seal

Date:

Place:

**Business Address:** 







#### Annexure 12: Unconditional Performance Bank Guarantee

Ref:	Date
Bank Guarantee No.	
<name. <address="" <designation.="" <fax="" <phone="" nos="" nos<="" td=""><td></td></name.>	
<email id.<="" td=""><td></td></email>	

Whereas, <<name of the supplier and address. (hereinafter called "the supplier") has undertaken, in pursuance of contract no. <Insert Contract No.dated.<Date.to provide Implementation services for<<Name of the assignment.to Patna Smart City Limited (hereinafter called "the PSCL")

And whereas it has been stipulated by in the said contract that the bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank.a banking company incorporated and having its head/registered office at<Address of Registered Office> and having one of its office at <Address of Local Office. have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of Rs.<Insert Value. (Rupees <Insert Value in Words. only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <Insert Value. (Rupees <Insert Value in Words. only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the System Integrator shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until << Insert Date.) notwithstanding anything contained herein:







- a. Our liability under this bank guarantee shall not exceed Rs. <Insert Value. (Rupees <Insert Value in Words only).
- b. This bank guarantee shall be valid up to (<Insert Expiry Date.)

It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <Insert Expiry Date.) failing which our liability under the guarantee will automatically cease.

Date

Place
Signature
Witness
Printed name
(Bank's common seal)





#### Annexure 13: Unconditional Bank Guarantee for Earnest Money Deposit

To.

- <Name.
- <Designation.
- <Address.
- <Phone Nos...
- <Fax Nos...
- <Email id.

Whereas << Name of the bidder... (Hereinafter called 'the supplier') has submitted the bid for Submission of RFP << RFP Number..... Dated << Date.... for << Name of the assignment.... (Hereinafter called "the Bid") to << PSCL.....

Know all Men by these present that we <<..... Having our office at <<Address.... (Hereinafter called "the Bank") are bound unto the <<Patna Smart City Limited (Hereinafter called "the PSCL") in the sum of Rs. <<Amount in figures.. (Rupees <<Amount in words. only) for which payment well and truly to be made to the said PSCL, the Bank binds itself, its successors and assigns by these presents.

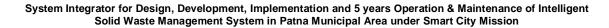
Sealed with the Common Seal of the said Bank this << Date...

The conditions of this obligation are:

- (i) If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
- (ii) If the Bidder, having been notified of the acceptance of its bid by the PSCL during the period of validity of bid :
  - a. Withdraws his participation from the bid during the period of validity of bid document: or
  - b. Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the PSCL up to the above amount upon receipt of its first written demand, without the PSCL having to substantiate its demand, provided that in its demand the PSCL will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <<insert date.... and including <<extra time over and above mandated in the RFP.... from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.







## NOTHWITHSTANDING ANYTHING CONTAINED HEREIN:

- (i) Our liability under this Bank Guarantee shall not exceed Rs. <<Amount in figures.. (Rupees<<Amount in words.. only)
- (ii) This Bank Guarantee shall be valid up to <<insert date..)
- (iii) It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before <<insert date...) failing which our liability under the guarantee will automatically cease.

	or demand for payment under this Bank Guarantee on or before < <insert date<="" th=""></insert>
	failing which our liability under the guarantee will automatically cease.
(Authori	ized Signatory of the Bank)

Authorized Signatory of the Bank)	
eal: ate:	





#### **Annexure 14: Format for Power of Attorney to Authorize Signatory**

#### **POWER OF ATTORNEY**

[To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant Stamp Act. The stamp paper to be in the name of the company who is issuing the power of attorney.]
We, M/s(name of the firm or company with address of the registered office) hereby constitute, appoint and authorize Mr. or Ms(Name and residential address) who is presently employed with us and holding the position of, as our Attorney to do in our name and our behalf all or any of the acts, deeds or things necessary or incidental to our RFP for the Project (name of the Project), including signing and submission of the RFP response, participating in the meetings, responding to queries, submission of information or documents and generally to represent us in all the dealings with Client or any other Government Agency or any person, in connection with the works until culmination of the process of bidding till the Project Agreement is entered into with(Client) and thereafter till the expiry of the Project Agreement.
We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us.
Dated this the day of 2020 (Signature and Name of authorized signatory) (Signature and Name in block letters of all the remaining partners of the firm Signatory for the Company)
Seal of firm Company
Witness 1:
Witness 2:

Note: The Mode of execution of the power of attorney should be in accordance with the procedure, if any laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.





#### **Annexure 15: Form of Contract Agreement (Draft)**

This **contract agreement** is made on the *[insert: number]* day of *[insert: month]*, *[insert: year]*.

#### between

- (1) *[insert: Name of Client 1]*, (hereinafter called "the Client"),
- (2) [insert: name of the bidder], (hereinafter called "the bidder").

Whereas the Client desires for "Design, Development, Implementation and Operation & Maintenance of Intelligent Solid WasteManagement System for Patna Municipal Corporation Area" and submit all deliverables and have agreed to such engagement upon and subject to the terms and conditions appearing below in this Contract Agreement.

#### **NOW IT IS HEREBY AGREED** as follows:

#### 1. Article 1 - Contract Documents

#### 1.1 Contract Documents

The following documents shall constitute the Contract between Dept and the Firm, and each shall be read and construed as an integral part of the Contract:

This Contract Agreement and the Appendices attached to the Contract Agreement.

- (a) Notification of Award
- (b) The Bid and Price Schedules submitted by the bidder
- (c) Special Conditions of Contract
- (d) General Conditions of Contract
- (e) Pre-bid conference minutes.
- (f) Bid document with modification if any
- (g) Any other documents

#### 1.2 Order of Precedence

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

#### 1.3 Definitions (Reference GCC)

Capitalized words and phrases used in this Contract Agreement shall have the same meanings as are ascribed to them in the General Conditions of Contract.





#### 2. Article 2 - Contract Price and Terms of Payment

#### 2.1 *Contract Price*

The Client hereby agrees to pay to the bidder as amount of **Rs. Xxxx /-** for the items mentioned in the Commercial Form. The Contract Price in consideration of the performance by the bidder of its obligations under the Contract.

#### 3. Article 3 - Effective Date for Determining Time for Operational Acceptance

- 3.1 *Effective Date:* The time allowed for execution, delivering deliverables and Acceptance of the same should be determined from the date when all of the following conditions have been fulfilled:
- (a) This Contract Agreement has been duly executed for and on behalf of the Client and the bidder;
- (b) The bidder has submitted to the Client the Implementation cum performance security.

#### 4. **Article 4 – Jurisdiction**

Any legal proceedings arising out of the agreement shall be subject to the appropriate court in Patna.

#### 5. **Article 5 – Appendixes**

- 5.1. The Appendixes listed in the attached List of Appendixes shall be deemed to form an integral part of this Contract Agreement.
- 5.2. Reference in the Contract to any Appendix shall mean the Appendixes attached to this Contract Agreement, and the Contract shall be read and construed accordingly.

*IN WITNESS WHERE OF* User and the Selected Firm has caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

in the capacity of [insert: title or other appropriate designation]
in the presence of
For and on behalf of the Bidder Signed: in the capacity of [insert: title or other appropriate designation]
in the presence of
Place: Signature with seal
Date:





(Date)

#### **Annexure 16: Letter of Acceptance**

#### LETTER OF ACCEPTANCE

(Letterhead paper of the Employer)

To (Name and address of the Contractor) Dear Sir. This is to notify you that your Bid dated -----for execution of the------ ---- (name of the contract and identification number, as given in the Instructions to Bidders) for the Contract Price of Rupees ---- ----( ) (amount in words and figures), as corrected and modified in accordance with the Instructions to Bidders1 is hereby accepted by our agency. We accept/ do not accept that ---- ---- ---appointed as the Adjudicator2. Your are hereby requested to furnish Performance Security, in the form detailed in Para 34.1 of ITB for an amount equivalent to Rs. Within 15 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. up to and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken. Yours faithfully, Authorized Signature Name and title of **Signatory** Name of Agency

- 1 Delete "corrected and" or "and modified" if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.
- 2 To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders".





#### **Annexure 17: Notice to Proceed**

#### ISSUE OF NOTICE TO PROCEED WITH THE WORK

(Letterhead of the Employer)

	(Date)
То	
(Name and address of the Contractor)	
Dear Sir,	
Pursuant to your furnishing the requisite security as stip and signing of the Contract for the construction of at	
You are hereby instructed to proceed with the execution accordance with the contract documents.	n of the said works in
	Yours faithfully,
	(Signature, name and title of signatory authorized to sign on behalf of Employer)





# Annexure 18: Certificate Regarding restriction on procurement from a bidder which shares land border with India

(Letterhead of the Employer)

To,
The Managing Director
Patna Smart City Limited
Patna

Dear Sir,

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; as mentioned in Public Procurement Division, Department of Expenditure, Ministry of Finance, Office Memorandum No. F.No.6/18/2019-PPD dated 23 July 2020 and certify that this bidder is not from such a country and is eligible to be considered.

Or

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; as mentioned in Public Procurement Division, Department of Expenditure, Ministry of Finance, Office Memorandum No. F.No.6/18/2019-PPD dated 23 July 2020 and certify that I am from such a country, however, I have been registered with the competent authority. I further certify that this bidder fulfills all reugirements contained in the aforesaid OM and is eligible to be considered.

Yours faithfully,

(Signature, name and title of signatory authorized to sign on behalf of Employer)

Note: Strike of whichever is not applicable (Office memorandum enclosed)

F.No.6/18/2019-PPD Ministry of Finance Department of Expenditure Public Procurement Division

> 161, North Block, New Delhi 23rd July, 2020

## Office Memorandum

# Subject: Insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017

Rule 144 of the General Financial Rules 2017 entitled 'Fundamental principles of public buying', has been amended by inserting sub-rule (xi) as under:

Notwithstanding anything contained in these Rules, Department of Expenditure may, by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions.

(Sanjay Prasad)
Joint Secretary (PPD)
Email ID: js.pfc2.doe@gov.in

Telephone: 011-23093882

To,

(1) Secretaries of All Ministries/ Departments of Government of India

(2) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

#### F.No.6/18/2019-PPD Ministry of Finance Department of Expenditure Public Procurement Division

161, North Block, New Delhi 23rd July, 2020

## Order (Public Procurement No. 1)

Subject: Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

Attention is invited to this office OM no. 6/18/2019-PPD dated 23<sup>rd</sup> July 2020 inserting Rule 144 (xi) in GFRs 2017. In this regard, the following is hereby ordered under Rule 144 (xi) on the grounds stated therein:

## Requirement of registration

- Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in Annex I.
- This Order shall not apply to (i) cases where orders have been placed or contract has been concluded or letter/notice of award/ acceptance (LoA) has been issued on or before the date of this order; and (ii) cases falling under Annex II.

# Transitional cases

- Tenders where no contract has been concluded or no LoA has been issued so far shall be handled in the following manner:
  - a) In tenders which are yet to be opened, or where evaluation of technical bid or the first exclusionary qualificatory stage (i.e. the first stage at which the qualifications of tenderers are evaluated and unqualified bidders are excluded) has not been completed. No contracts shall be placed on bidders from such countries. Tenders received from bidders from such countries shall be dealt with as if they are non-compliant with the tender conditions and the tender shall be processed accordingly.
  - If the tendering process has crossed the first exclusionary qualificatory stage: If the qualified bidders include bidders from such countries, the

- entire process shall be scrapped and initiated de novo. The de novo process shall adhere to the conditions prescribed in this Order.
- c) As far as practicable, and in cases of doubt about whether a bidder falls under paragraph 1, a certificate shall be obtained from the bidder whose bid is proposed to be considered or accepted, in terms of paras 8, 9 and 10 read with para 1 of this Order.

#### Incorporation in tender conditions

In tenders to be issued after the date of this order, the provisions of paragraph 1
and of other relevant provisions of this Order shall be incorporated in the tender
conditions.

#### Applicability

- Apart from Ministries / Departments, attached and subordinate bodies, notwithstanding anything contained in Rule 1 of the GFRs 2017, this Order shall also be applicable
  - a. to all Autonomous Bodies;
  - b. to public sector banks and public sector financial institutions; and
  - subject to any orders of the Department of Public Enterprises, to all Central Public Sector Enterprises; and
  - d. to procurement in Public Private Partnership projects receiving financial support from the Government or public sector enterprises/ undertakings.
  - Union Territories, National Capital Territory of Delhi and all agencies/ undertakings thereof

#### Definitions

- 6. "Bidder" for the purpose of this Order (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.
- "Tender" for the purpose of this Order will include other forms of procurement, except where the context requires otherwise.
- "Bidder from a country which shares a land border with India" for the purpose of this Order means

- a) An entity incorporated, established or registered in such a country; or
- A subsidiary of an entity incorporated, established or registered in such a country; or
- An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d) An entity whose beneficial owner is situated in such a country; or
- e) An Indian (or other) agent of such an entity; or
- f) A natural person who is a citizen of such a country; or
- g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- "Beneficial owner" for the purpose of paragraph 8 above will be as under:
  - (i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means. Explanation—
    - a. "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
    - b. "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
  - In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  - (iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
  - (iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

- (v) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- 10. "Agent" for the purpose of this Order is a person employed to do any act for another, or to represent another in dealings with third persons.

#### Sub-contracting in works contracts

11. In works contracts, including turnkey contracts, contractors shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "contractor from a country which shares a land border with India" shall be as in paragraph 8 above. This shall not apply to sub-contracts already awarded on or before the date of this Order.

#### Certificate regarding compliance

12. A certificate shall be taken from bidders in the tender documents regarding their compliance with this Order. If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law.

# Validity of registration

13. In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

## Government E-Marketplace

14. The Government E-Marketplace shall, as soon as possible, require all vendors/ bidders registered with GeM to give a certificate regarding compliance with this Order, and after the date fixed by it, shall remove non-compliant entities from GeM unless/ until they are registered in accordance with this Order.

#### Model Clauses/ Certificates

15. Model Clauses and Model Certificates which may be inserted in tenders / obtained from Bidders are enclosed as Annex III. While adhering to the substance of the Order, procuring entities are free to appropriately modify the wording of these clauses based on their past experience, local needs etc. without making any reference to this Department.

> (Santay Prasad) Joint Secretary (PPD) Email ID: js.pfc2.doe@gov.in

Telephone: 011-23093882

To

- (1) Secretaries of All Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform these provisions to all procuring entities.
- (2) Secretary, Department of Public Enterprises with a request to immediately reiterate these orders in respect of Public Enterprises.
- Secretary DPIIT with a request to initiate action as provided under Annex I (3)
- (4) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

# Annex I: Competent Authority and Procedure for Registration

- A. The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)\*.
- B. The Registration Committee shall have the following members\*:

i. An officer, not below the rank of Joint Secretary, designated for this

purpose by DPIIT, who shall be the Chairman;

 Officers (ordinarily not below the rank of Joint Secretary) representing the Ministry of Home Affairs, Ministry of External Affairs, and of those Departments whose sectors are covered by applications under consideration;

iii. Any other officer whose presence is deemed necessary by the

Chairman of the Committee.

- C. DPIIT shall lay down the method of application, format etc. for such bidders as stated in para 1 of this Order.
- D. On receipt of an application seeking registration from a bidder from a country covered by para 1 of this Order, the Competent Authority shall first seek political and security clearances from the Ministry of External Affairs and Ministry of Home Affairs, as per guidelines issued from time to time. Registration shall not be given unless political and security clearance have both been received.
- E. The Ministry of External Affairs and Ministry of Home Affairs may issue guidelines for internal use regarding the procedure for scrutiny of such applications by them.
- F. The decision of the Competent Authority, to register such bidder may be for all kinds of tenders or for a specified type(s) of goods or services, and may be for a specified or unspecified duration of time, as deemed fit. The decision of the Competent Authority shall be final.
- G. Registration shall not be granted unless the representatives of the Ministries of Home Affairs and External Affairs on the Committee concur\*.
- H. Registration granted by the Competent Authority of the Government of India shall be valid not only for procurement by Central Government and its agencies/ public enterprises etc. but also for procurement by State Governments and their agencies/ public enterprises etc. No fresh registration at the State level shall be required.

- I. The Competent Authority is empowered to cancel the registration already granted if it determines that there is sufficient cause. Such cancellation by itself, however, will not affect the execution of contracts already awarded. Pending cancellation, it may also suspend the registration of a bidder, and the bidder shall not be eligible to bid in any further tenders during the period of suspension.
- J. For national security reasons, the Competent Authority shall not be required to give reasons for rejection / cancellation of registration of a bidder.
- K. In transitional cases falling under para 3 of this Order, where it is felt that it will not be practicable to exclude bidders from a country which shares a land border with India, a reference seeking permission to consider such bidders shall be made by the procuring entity to the Competent Authority, giving full information and detailed reasons. The Competent Authority shall decide whether such bidders may be considered, and if so shall follow the procedure laid down in the above paras.
- L. Periodic reports on the acceptance/ refusal of registration during the preceding period may be required to be sent to the Cabinet Secretariat. Details will be issued separately in due course by DPIIT.

#### [\*Note:

- i. In respect of application of this Order to procurement by/ under State Governments, all functions assigned to DPIIT shall be carried out by the State Government concerned through a specific department or authority designated by it. The composition of the Registration Committee shall be as decided by the State Government and paragraph G above shall not apply. However, the requirement of political and security clearance as per para D shall remain and no registration shall be granted without such clearance.
- ii. Registration granted by State Governments shall be valid only for procurement by the State Government and its agencies/ public enterprises etc. and shall not be valid for procurement in other states or by the Government of India and their agencies/ public enterprises etc.]

## Annex II: Special Cases

- A. Till 31<sup>st</sup> December 2020, procurement of medical supplies directly related to containment of the Covid-19 pandemic shall be exempt from the provisions of this Order.
- B. Bona fide procurements made through GeM without knowing the country of the bidder till the date fixed by GeM for this purpose, shall not be invalidated by this Order.
- C. Bona fide small procurements, made without knowing the country of the bidder, shall not be invalidated by this Order.
- D. In projects which receive international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed, notwithstanding anything contained in this Order and without reference to the Competent Authority. Exceptions to this shall be decided in consultation with DEA.
- E. This Order shall not apply to procurement by Indian missions and by offices of government agencies/ undertakings located outside India.

#### Annex III

#### Model Clause /Certificate to be inserted in tenders etc.

(While adhering to the substance of the Order, procuring entities and GeM are free to appropriately modify the wording of the clause/ certificate based on their past experience, local needs etc.)

#### Model Clauses for Tenders

- Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
  - a. An entity incorporated, established or registered in such a country; or
  - A subsidiary of an entity incorporated, established or registered in such a country; or
  - An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d. An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
  - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
  - In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
     Explanation—
    - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent, of shares or capital or profits of the company;

- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- In case of a partnership firm, the beneficial owner is the natural person(s)
  who, whether acting alone or together, or through one or more juridical
  person, has ownership of entitlement to more than fifteen percent of
  capital or profits of the partnership;
- In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. [To be inserted in tenders for Works contracts, including Turnkey contracts] The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Model Certificate for Tenders (for transitional cases as stated in para 3 of this Order)

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered."

#### Model Certificate for Tenders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the

Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

# Model Certificate for Tenders for Works involving possibility of sub-contracting

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

#### Model Certificate for GeM:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this vendor/ bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this vendor/ bidder fulfills all requirements in this regard and is eligible to be considered for procurement on GeM. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

12/12

\*\*\*\*\*\*