Municipal Corporation of Greater Mumbai

Bid Document

for

Implementation of GPS Based Vehicle Tracking and Monitoring System

Issued By

Director, IT
Municipal Corporation of Greater Mumbai

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1 Glossary

Terms	*Meaning*
BOM	Bill Of Material
BEC	Bid Evaluation Committee
EMD	Earnest Money Deposit
IT	Information Technology
NDA	Non-Disclosure Agreement
LOI	Letter of Invitation
SLA	Service Level Agreement
PC	Personal Computer
GIS	Geographical Information System
GPS	Global Positioning System
RFID	Radio Frequency Identification
VTMS	Vehicle Tracking & Monitoring System
SWM	Solid Waste Management
SWD	Storm Water Drainage
PCO	Pest Control Office

2 Introduction

2.1 Project Background

From private sector to public sector, to productivity and back office procedures, technology has pervaded every aspect of the business world. Increased access to the global positioning system (GPS) has given enterprises a way to directly track, monitor and manage their most important assets.

MCGM, therefore, through one of its major IT initiatives, intends to have a Vehicle Tracking and Monitoring System (VTMS) to monitor, manage and control vehicles owned by them. The following are departments within MCGM having vehicle fleets –

- Solid Waste Management (SWM),
- Strom Water Drainage (SWD),

To manage, maintain and monitor the vehicles is one of the major challenges for departments. Hence an introduction of a system which can track, help locate and monitor and help in managing the vehicles and the jobs carried out the by department people using the vehicle is an important requirement.

2.2 Project Objective

The overall goal of this project is the implementation of a reliable tracking system to monitor vehicles as well as maintenance of vehicles and personnel. In order to fulfil this goal, the project has been categorised into several high level objectives -

Vehicle Tracking:

One of the primary objectives of the project is to track the locations of the vehicles owned by MCGM at real time along with their routes on GIS maps and report deviations if any. Managing a fleet involves coordination between all the vehicles that work under the company to that of the manger or in some cases between a fleet and the fleet supervisor. This coordination helps the manger or supervisor to locate the nearest vehicle to an outage and sent it to the place. This helps saving both money and time. Another advantage is that the records can be maintained easily, work can be assigned easily to the fleet.

Monitoring and control:

The MCGM departments using fleets also want to monitor the vehicles along with some department specific activities like garbage collection points for compliance to the route specified and identify deviations in operations. The monitoring and control mechanism should be capable of addressing emergencies and as well as complaints using the vehicles. A controlling mechanism for vehicles should be in place to cater to dynamic routes for a vehicle at any time.

Reporting:

When working with fleets paper work is inevitable, all the details related to a vehicle must be kept for future references. Use of tracking technologies come as a life saviour for the fleet manger as it is extremely cumbersome to maintain all the work manually without mistakes. Having a Management Information System to cater to reports based on certain predefined parameters of vehicle identification, vehicle location, vehicle routes, schedule times, geographic areas, history, deviations etc. should also form part of the VTMS.

2.3 Bid Document Notice

- This Bid Document is being published by the Director of Information Technology, Municipal Corporation of Greater Mumbai, for the Project “Implementation of GPS Based Vehicle Tracking & Monitoring System”.
- Bidder agencies are advised to study this Bid Document carefully before submitting their proposals in response to the Bid Document Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

- This Bid Document is not transferable.

2.4 Bid Invitation

- The Director IT, Municipal Corporation of Greater Mumbai invites the reputed bidders to submit their financial offers for the project of *"Implementation of GPS Based Vehicle Tracking & Monitoring System"* in accordance with conditions and manner prescribed in this Bid Document.

3 Pre-Qualification Criteria

#	Pre-Qualification Criteria	Proof Document Required
1.	The Bidder(s) must be a company in India Registered under The Company's Act 1956.	Attested copy of Certificate of Incorporation / Registration Certificate
2.	The Bidder(s) could be individual companies or a Consortium of companies. The Consortium can be of maximum 3 Companies. In case of a Consortium the members must nominate one of them as the Prime Bidder who shall be responsible to MCGM for undertaking and discharging all responsibilities related to the Bid Process and the Project. The arrangement among the members of the Consortium shall be disclosed in the bid and binding on the members and no change in role and responsibility of the members would be accepted after the submission of the bid. The Prime Bidder shall respond to all queries and clarifications and ensure compliance to Bid Process requirements. The consortium partners of any firm should not enter in to consortium / JV / sub contract/ etc... with more than one Prime Bidder	1. Consortium Agreement 2. Power of Attorney
3.	The Bidder or the Prime Bidder (in case of consortium / JV) Should have an annual turnover of **25 Cr** in last three years.	A copy of turn over statement duly certified by the CA.
4.	The Bidder or the Prime Bidder Or the consortium partner (in case of consortium / JV / sub contract) should have **completed or currently in operation at least one order (single order) of providing** GPS based vehicle tracking system with at least **300 vehicles** to Government / PSU / Reputed Private Sector Organization in last 3 financial years or in current financial year.	Copy of work order / Completion Certificate / Performance Certificate.
5.	The Bidder or the Prime Bidder Or the consortium partner (in case of consortium / JV / sub contract) should have **completed or currently in operation at least one order**	Copy of work order / Completion Certificate / Performance Certificate.

#	Pre-Qualification Criteria	Proof Document Required
	(single order) of having 1000 installations of RFID tags & readers to Government / PSU / Reputed Private Sector Organization in last 3 financial years or in current financial year.	
6.	The Bidder should have supplied at least one GPS Based Vehicle Tracking Solution (including GPS based devices and its maintenance) based solution with a total work **order value of minimum 5 Cr.** in last 3 financial years.	Details of contracts relating to supplying of Supply of GPS based vehicle tracking solution (including GPS based devices and its maintenance) along with attested copies of the supply order in 2010-11, 2011-12, 2012-13.
7.	The bidder must have on its roll at least 50 technically qualified professionals in the area of GPS based Vehicle Tracking / RFID solutions & Software / System Integration in providing the services as on 31/12/2013. (Excluding contractual, temporary and outsourced persons/workers)	Certificate from the Head HR in company letter head
8.	Bidder should have office in Mumbai or Mumbai Sub urban region.	Attested copy of the registration certificate of branch office
9.	The bidder should not have been blacklisted by Central Government or any State Government organization / department in India at the time of submission of the Bid	Declaration letter by bidder as per format given in the Bid Document

4 Instructions to Bidder

4.1 Bid Data Sheet

#	Information	Details
A. Introduction		
1.	Project Name	Implementation of GPS based Vehicle Tracking & Monitoring System
2.	Bid Document reference No and Start Date	7100028633 09/05/2014
3.	Bid Type	Open Tender via e-Tendering system
4.	Bid Fee (excluding 5% VAT)	INR 10,000/- (Rupees Ten Thousand Only)
5.	Bid Download Due Date	30/05/2014 3:00 PM
6.	Earnest Money Deposit (EMD)	INR 35,25,800/- (Rupees Thirty Five Lakhs Twenty Five Thousand Eight Hundred Only)
7.	EMD Submission Due Date & Time	**Date:30/05/2014** **Time: 3:00 PM**
8.	Bank Solvency Certificate	INR 60,00,000/- (Rupees Sixty Lakhs Only)
9.	Performance Bank Guarantee	10% of the contract value
10.	Addressee and Address for the EMD to be submitted	Municipal Corporation of Greater Mumbai
B. Preparation of Bids		
11.	Language of Bid	English
12.	Bid Validity Period	180 Days from the Date of Opening of Bid
13.	Performance Security Validity Period	3 months after expiration of all the contractual obligations
C. Bid Presentation		
14.	Last date for submission of queries for clarifications	15/05/2014 3:00 pm
15.	Query Submission	To be submitted via e-mail only. *Kindly refer to section 4.6 for query format.*
16.	Date ,Time & address of Pre-bid meeting	**Place**: Municipal Corporation Of Greater Mumbai, AMC (ES) Chamber, 3rd Floor, Municipal Head Office, Extension Building, Mahapalika Marg, Mumbai- 400001 **Date** : 16/05/2014 **Time**: 11:00 am

#	Information	Details
17.	Contact Person for clarification of Queries	**Shri. Mahesh Narvekar, Director IT** Municipal Corporation of Greater Mumbai, Worli Data Center, Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai -400018
18.	Contact Information	**E-mail:** director.it@mcgm.gov.in **Phone No:** 022-24811275
D. Submission and Opening of Bids		
19.	Last date (deadline) for receipt of proposals in response to Bid Document notice	30/05/2014 3:00 pm **At**: Municipal Corporation of Greater Mumbai, Worli Data Center, Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai -400018
20.	Place, Time and Date of opening of Bids received in response to the Bid Document notice	30/05/2014 4:00 pm **At**: Municipal Corporation of Greater Mumbai, Worli Data Center, Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai -400018
21.	Place, Time and Date of opening of Technical proposals received in response to the Bid Document notice	30/05/2014 4:00 pm **At**: Municipal Corporation of Greater Mumbai, Worli Data Center, Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai -400018
22.	Place, Time and Date of opening of Financial proposals received in response to the Bid Document notice	To be Informed Later
E. Evaluation of Bids and Awarding of Contract		
23.	Signing of Contract Agreement with MCGM	Within 30 days after the declaration of results

4.2 Purpose of Bid Document

- The purpose of this Bid Document is to engage Implementation Agency for GPS Based Vehicle Tracking & Monitoring System for MCGM. This document provides information to enable the bidders to understand the broad requirements to submit their "Bids". The detailed scope of work is provided in Section 0 of this Bid Document.

4.3 Cost of Bid Document

- The Cost of Tender document is **(INR 10,000/-, Ten Thousand only) + 5% VAT,** to be submitted online.

4.4 Bidder Registration and Instructions

- Bidders shall get themselves registered as MCGM's vendor by paying necessary fees to MCGM by following due Procedure.
- Bidders are advised to study all instructions, forms, terms, requirements and other information in the Bid Documents carefully. Submission of bid shall be deemed to have been done after careful study and examination of the Bid Document with full understanding of its implications. The response to this Bid Document should be full and complete in all respects. Failure to furnish all information required by the Bid Documents or submission of a proposal not substantially responsive to the Bid Documents in every respect will be at the bidder's risk and may result in rejection of its Proposal.
- The vendors are requested to register using the following instructions:
- Fill in the Vendor Registration Form (available at http://mcgm.gov.in/irj/portalapps/com.mcgm.atenders_overview/docs/Modified%20Vendor%20Registration%20Form.pdf) and submit it with required documents listed in the form at the Byculla office (address mentioned on the top left section of the form)
- Once submitted, you shall receive the vendor acknowledgement number which needs to be quoted and sent to etendering.it@mcgm.gov.in (Phone - 022-24811275) from the registered e-mail ID (used in the registration form) seeking credentials.
- The eTendering team at MCGM shall respond to this request with system credentials to be used by the vendor for bidding.
- For detailed instructions, please also read the document on the hyperlink – Instruction to Vendors

4.5 Proposal Preparation Cost

- The bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by MCGM to facilitate the evaluation process, and in negotiating a definitive Contract or all such activities related to the bid process. The department will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- This Bid Document does not commit the department to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award. All materials submitted by the Bidder shall become the property of the department and may be returned at its sole discretion.

4.6 Pre-Bid Meeting

- MCGM will host a Pre-Bid Meeting for queries (if any) by the prospective bidders. The date, time and place of the meeting are given in Section 4.1 of this document. The representatives of the bidders may attend the pre-bid meeting at their own cost. The purpose of the pre-bid meeting is to provide a forum to the bidders to clarify their doubts / seek clarification or additional information, necessary for them to submit their bid.
- All enquiries from the bidders relating to this Bid Document must be submitted to the designated contact person as mentioned in the Bid Data Sheet below. The queries should necessarily be submitted in the following format as a Word Document:

Sr. No.	Bid Document Reference (Volume, Section No., Page No.)	Content of the Bid Document requiring clarification	Clarification Sought / Query
1 2 3 …			

- Authorisation letter in the name of the person attending pre-bid meeting needs to be submitted on the letterhead of the Bidder during the pre-bid meeting in the format specified in Annexure VII.
- Queries submitted post the deadline mentioned in the Bid Data Sheet or which do not adhere to the above mentioned format may not be responded to. All the responses to the queries (clarifications / corrigendum) shall be made available on the MCGM website. (http://www.mcgm.gov.in/irj/portal/anonymous/qletenders)

4.7 Amendment of Bid Document

- At any time prior to the deadline for submission of bids, the Department, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Document by an amendment. All the amendments made in the document would be informed to all the participating bidders through mail.
- The bidders are advised to visit the website (as stated in section 4.6 of this document) on regular basis for checking necessary updates. The Department also reserves the rights to amend the dates mentioned in this Bid Document for bid process. It will be assumed that the amendments have been taken into account by the Bidder in its bid.
- In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Department may, at its discretion, extend the last date for the receipt of Bids.

4.8 Rights to Terminate the Process

- MCGM may terminate the Bid Document process at any time and without assigning any reason. MCGM makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- This Bid Document does not constitute an offer by MCGM. The bidder's participation in this process may result in MCGM selecting the bidder to engage in further discussions and negotiations toward inclusion in empanelment. The commencement of such negotiations does not, however, signify a commitment by MCGM to execute a contract or to continue negotiations. MCGM may terminate negotiations at any time without assigning any reason.

4.9 Site Visit

- The bidders may visit the site and obtain additional information at their own cost and responsibility. However, a prior appointment needs to be fixed by the bidder for the same.

4.10 Language of Bids

- The Bids prepared by the Bidder and all correspondence and documents relating to the bids shared by the Bidder with MCGM, shall be written in English language, provided that any printed literature furnished by the Bidder in another language shall be accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern.
- If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the bidder.

4.11 Bid Submission Format

- The entire proposal shall be strictly as per the format specified in this Bid Document. Bids with deviation from this format shall be rejected. Details of the format can be found in Annexure of this document.

4.12 Documents Comprising of Bids

- The following table is provided as the guideline for submitting various important documents along with the bid.

#	Type of Packet	Documents to be submitted
01	Pre-Qualification Folder (Packet A)	✓ Bid Covering Letter ✓ Scanned copy of Demand Draft for EMD ✓ Board Resolution authorizing the Bidder to sign/ execute the proposal as a binding document and also execute all relevant agreements forming part of Bid Document Or Power of Attorney executed by the Bidder in favour of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this Tender ✓ Particulars of the Bidders (in the formats given subsequently) ✓ Copy of Certificate of Incorporation ✓ Solvency Certificate ✓ Copy of Audited Balance Sheet for each of the last 3 financial years certified by Chartered Accountant ✓ Copy of the audited Profit & Loss Statements for each of the last 3 financial years certified by Chartered Accountant. (2012-13, 2011-12,2010-11) ✓ Certificate from the Chartered Accountant towards turnover of the company in last three years. (2012-13, 2011-12,2010-11) ✓ Certificate of completion from clients for Vehicle Tracking projects valued minimum of Rs. 5 Cr in each of the last 3 financial years. (2012-13, 2011-12,2010-11) ✓ Details of the project in the relevant format given, towards proof of projects executed for Government Organization (PSU / Municipalities / Government Departments / Nationalized Banks) in India in last 3 Years Consolidated. (2012-13, 2011-12,2010-11) ✓ Declaration letter that the firm is not blacklisted by Central Government or any State Government organization / department in India at the time of submission of the Bid, in the format given in the Bid Document ✓ Certificate from HR confirming that the bidder has on its payroll at least 20 technically qualified professionals in the area of GPS based Vehicle Tracking / RFID solutions & Software / System Integration / Networking Operators. ✓ Certified copies of valid PAN Card ✓ Statement of Deviation from the Bid Document Requirements in the Format given the Bid Document
02	Technical Proposal Folder (Packet B)	✓ Technical Proposal in the format specified in Section 8.1 ✓ Supporting documents as required ✓ Commercial Proposal Cover Letter ✓ "Best Price" Offer Letter
03	Commercial Proposal Folder (Packet C)	✓ Commercial Bid

❖ Bidders shall furnish the required information on their Pre-Qualification, technical and financial proposals in enclosed formats only. Any deviations in format may make the tender liable for rejection. Disclosure of Commercial information of the bid in Pre-Qualification or Technical Envelope shall be sufficient grounds for rejection of the bid.

4.13 Earnest Money Deposit (EMD) and Refund

❖ Bidders shall submit, along with their Bids, EMD of **35,25,800/- (Rupees Thirty Five Lakhs Twenty Five Thousand Eight Hundred Only),** and shall be paid in the form of Demand Draft, drawn in favour of "Municipal Corporation of Greater Mumbai" by any of the approved banks as specified in Annexure VI of the Bid Document, payable at Mumbai.

- As per circular U/No. CA/FRD/I/29 dated 04.10.2012, the bidders shall pay the EMD through Demand Draft (DD) and shall upload the scanned copy of the Demand Draft in the Pre-Qualification Folder (Packet 'A') instead of paying the EMD at any of the CFC centres in MCGM Ward Offices. The bidder shall submit the original DD in a separate envelope super scribed as Pre-Qualification Folder(Packet A) and in person by 4:00 pm of the due date of the submission of the tender. **If such DD is not submitted physically as specified, the tender shall be treated as non-responsive and shall not be opened.**
- In case bid is submitted without EMD as mentioned above then the Department reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
- Unsuccessful Bidder's EMD will be discharged/ returned as promptly as possible, but not later than 30 days after Signing of the Contract with the Selected Vendors.
- EMDs of all bidders barring first 4 top scoring bidders shall be returned immediately after recommendation of tender committee without waiting for their requests. EMDs of 3rd & 4th highest scoring bidders shall be returned on their written request after recommendation of tender committee. After returning EMD to these two bidders, for any reason, if these bidders become eligible for contract as per the recommendation of Tender Committee, they will not have any right to claim the contract. After issuing acceptance letter to the top scoring bidder, the EMD of 2nd highest scoring bidder shall be returned immediately without waiting for their request. EMD of the successful bidder will be refunded after submission of security deposit and compliance of contractual formalities.
- The EMD may be forfeited:
    i. If a Bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any; or
    ii. In the case of successful bidders, if the Bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time in accordance with the format given in the Bid Document
    iii. During the bid process, if a Bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
    iv. During the bid process, if any information found wrong / manipulated / hidden in the bid.
- The decision of MCGM regarding forfeiture of the EMD and rejection of bid shall be final & shall not be called upon question under any circumstances.

4.14 Solvency Certificate

- A valid Bank Solvency Certificate of minimum **Rs. 60,00,000/- (Rs. Sixty Lakhs only)** that has been issued not more than six months prior to the date of submission of tender needs to submitted in the Pre-Qualification folder (Packet 'A').

4.15 Submissions of Bids

- Complete bidding process will be online (e-tendering) in three packet system. All the notification & details terms and conditions regarding, this tender notice hereafter will be published on line on web site http://www.mcgm.gov.in/irj/portal/anonymous/qletenders.
- Bidding documents can be seen, downloaded and submitted in electronic format on the website. The deadline for submission of bid is specified in section 4.1 of this document.
- Bids must be accompanied with scanned copies of Demand Draft of the EMD issued in favour of Municipal Corporation of Greater Mumbai, on any of the approved banks as specified in Annexure V of the Bid Document, payable at Mumbai.
- Bid shall be treated as invalid if scan copies are not submitted online along with the bid.
- As per circular CA/FRD/I/29 dated 04.10.2012, the bidders are required to submit Original Demand Draft of payment towards EMD by 4:00 pm of the due date of submission of EMD . The Physical form D.D.

submitted shall be the same as scanned copy submitted along with the bid. If a mismatch is found or the D.D. is not submitted physically on time, the tender shall be treated as non responsive and shall not be opened.

- Technical bids will be opened online on the website. The Details pertaining to time, date and place can be found in section 4.1 of this document.
- Bidder should submit information & scanned copies in PDF format in Pre-Qualification Envelope as mentioned in the Bid Document.
- Bidder should submit original documents along with scanned copies for verification during Technical bids opening.
- Time and date of opening of financial bids will be informed by email to technically qualified bidders.
- An authorized representative of the bidder should have valid class II / III Digital Signature Certificate (DSC) obtained from any Certifying Authority. The authorized representative of the Bidders shall digitally sign all pages of the original Technical Proposal and Commercial Bid. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been duly authorized to sign.
- As per circular CE/PD/5268/II dated 11.08.2006, on opening the Pre-Qualification folder, if is found that the bidder has not submitted required documents then the bidder shall be intimated to comply with the said documents within 3 days from the opening of the Pre-Qualification folder (Packet 'A') failing which 10% of the EMD paid by the bidder shall be forfeited.
- As per circular CE/PD/5268/II dated 11.08.2006, on opening the Technical Proposal folder, if is found that the bidder has not submitted required documents then the bidder shall be intimated to comply with the said documents within the stipulated time (maximum 7 days) from the opening of the Technical Proposal folder (Packet 'B') failing which 10% of the EMD paid by the bidder shall be forfeited.
- MCGM reserves the right to accept or reject any or all the tenders without assigning any reason. Moreover, if no intimation is provided by MCGM then the documents submitted cannot be deemed as accepted.

4.16 Modification or Withdrawal of Bids

- The Bidder may modify or withdraw its bid after submission, provided that written notice of the modification or withdrawal is received by MCGM prior to the deadline prescribed for bid submission. In case, the bidder uploads multiple options of specifications for the products, option with higher / better specifications shall be treated as final offer by the bidder for the rate quoted by the bidder in the commercial bid.
- The Bidder's modifications shall be prepared, digitally signed, marked, and then uploaded as per the process specified above.
- A Bidder wishing to withdraw its bid shall notify MCGM by e-mail prior to the deadline prescribed for bid submission. A withdrawal notice may also be sent by electronic means such as e-mail, but it must be followed by a signed confirmation copy, postmarked no later than the deadline for submission of bids. The notice of withdrawal shall

  (a) be addressed to MCGM at the address named in the Bid Data Sheet, and

  (b) bear the Contract/Project name, the <Title> and < Tender No.>, and the words "Bid Withdrawal Notice." Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a validly submitted bid.
- No bid may be withdrawn in the interval between the bid submission deadline and the expiration of the bid validity period specified in the BDS. Withdrawal of a bid during this interval may result in the forfeiture of the Bidder's bid security.

4.17 Evaluation Process

- The Bidder must possess the technical know-how and the financial wherewithal that would be required to successfully provide the services sought by MCGM, for the entire period of the contract. The Bidder's Bid must be complete in all respects, conform to all the requirements, terms and conditions and specifications as stipulated in the Bid Document.
- The evaluation process of the Bid Document proposed to be adopted by MCGM is indicated under this clause. The purpose of this clause is only to provide the Bidder an idea of the evaluation process that MCGM may adopt. However, MCGM reserves the right to modify the evaluation process at any time during the Tender process, without assigning any reason, whatsoever, and without any requirement of intimating the Bidder of any such change.
- MCGM shall appoint a Bidder's Evaluation Committee (BEC) to scrutinize and evaluate the technical and commercial bids received. The BEC will examine the Bids to determine whether they are complete, response and whether the Bid format confirms to the Bid Document requirements. MCGM may waive any informality or nonconformity in a Bid which does not constitute a material deviation according to MCGM.
- There should be no mention of bid prices in any part of the Bid other than the Commercial Bids.

4.18 Opening of Bid

- All the Bids received within the deadline shall be opened at the date, place and time mentioned in Section 4.1 of this tender document.
- The Bidders' representatives who are present shall be requested to sign the attendance sheet.
- Authorisation letter in the name of the person attending bid opening meeting needs to be submitted on the letterhead of the Bidder during bid opening in the format specified in Annexure VII.
- Once the bids are opened each bid will be checked for pre-qualification criteria.

4.19 Evaluation of Technical Bids

- The Technical Bids of only those Bidders, who qualify in the Pre-Qualification stage, shall be considered and will be evaluated as per the evaluation criteria in this clause. The Bid Evaluation Committee may invite each Bidder to make a presentation as part of the technical evaluation.
- The bidders' technical solutions proposed in the bid document will be evaluated as per the requirements specified in the Bid document and adopting the evaluation criteria spelt out is below.
- The evaluation parameters for the VTMS Project will be on a combination of the Technical Score that will carry a weight of 70% and Financial Score at 30%.
- The evaluation score will be a combination of Technical and financial score (QCBS).

Technical Evaluation of the bids would be carried out on broad parameters as given below:

1. Bidder's Competence (20% of the total weight age)
2. People (10% of the total weight age)
3. Quality of Proposal (30% of the total weight age)
4. Maintenance and Support (30% of the total weight age)
5. Presentation on Proposal (10% of the total weight age)

The 5 evaluation categories would be divided into various sub-categories, as broadly mentioned below:

1.] Bidder Competence

Evaluation Criteria	Max. Marks	Criteria
Capability of the Bidder to execute similar large projects	10	Experience of the bidder in implementing Vehicle Tracking Projects, with at least 300 vehicles or above (1 Project in last three years = 7 marks, At least 1 projects with Vehicle Tracking in Solid Waste Management = 1, Every Additional project = 1 marks)
	5	Experience of the bidder having RFID based tracking projects with at least 1000 installations (1 Project in last three years = 3 marks, At least 1 projects with Vehicle Tracking in Solid Waste Management = 1, Every Additional project = 1 marks)
Financial Capabilities of the Prime Bidder	5	Having a annual turnover in last 3 years: 15 Cr to 20 Cr – 3 Marks 20 Cr to 30 Cr – 4 Marks Above 30 Cr – 5 Marks

2.] People

Evaluation Criteria	Max. Marks	Criteria
Quality of Manpower in company	3	Total Strength in the firm for GPS based vehicle tracking and software / system integration (Strength of 50 = 2 Marks, Each additional 50 to carry 0.5 Marks)
Quality of the IT Manpower Proposed for the project Implementation & Support	7	Suitability of the proposed Project Manager in terms of relevant years of experience. (Above 8 years = 3 marks, 5 - 8 years = 2 marks, 2 – 4 years = 1 mark)
		Average experience of key members of the team such as Business Analysts, Programmers, testers. (Above 4 years = 2 mark, 2 – 4 years = 1 marks)
		Minimum Education Qualification of key members such Programmers, testers, trainers etc. (B.E. or equivalent 4 year course = 2 mark, B.Sc. or equivalent 3 year course = 1 marks)

3.] Quality of Bidder's Proposal

Evaluation Criteria	Marks	Evaluation Criteria
Bidder's Approach	10	Overall approach of the bidder to implementing the install, implement and Maintain the VTMS solution.
Bidder's compliance to the indicative Functional Requirement & Technical Requirements	7	Extent of compliance to the requirements specified in scope of work for Executive Feature Set) and additional features not specified in scope that can help in adding value to the solution. Meeting all Functional Requirements – 3.5 marks Meeting more than or equal to 70 % of Functional Requirements - 2 marks Meeting 50 % of Functional Requirements - 1 marks Meeting less than 50 % of Functional requirements- 0 marks. Meeting all Technical Specifications – 3.5 marks Meeting less than 100% of Technical Specifications – 0 marks
Project Management Methodology	7	Completeness of the proposed project plan with proper Timelines, Responsibility Matrix, and change management (3 marks)
		Strategy to meet implementation timelines (4 marks)
Bidder's awareness of risks in the project	6	Completeness of Project Risks identified (4 marks)
		Mitigation Plan provided for the identified risks (2 marks)

4.] Post Implementation Services and Support of the Solution Proposed

Evaluation Criteria	Marks	Sub-Criteria
Integration Approach	10	Approach on integration with Other system like weigh bridge, Fleet Management and GIS (10 marks)
Maintenance & Support for Proposed Solution	20	Provide training and support for VTMS solution to MCGM users (3 marks)
		Approach for replacement of the variable hardware (3 marks)
		Incident management system for issues related to VTMS solution and devices part of it (2 marks)
		Approach to Adherence to SLAs: 1. Solution Uptime (2 marks) 2. Devices Uptime (2 marks) 3. Location Accuracy (1 mark) 4. Replacement of Devices (2 marks) 5. Helpdesk (2 marks) 6. Bug resolution (2 marks) 7. Change request (1 mark)

5.] Presentation on Proposal

Evaluation Criteria	Marks	Sub-Criteria
Proposal Presentation	10	The bidder shall prepare a presentation on the technical proposal to be submitted for this project. The Bid Evaluation Committee shall evaluate the presentation based on the following criteria – 1. Understanding level demonstrated of the project scope. 2. Commitment towards providing the solution. 3. Quality of response against queries raised by the committee. The presentation shall also include the total number of points scored by the bidder for each of the four sections which shall be submitted in hard copy during the presentation meeting.

Evaluation shall be done based on the information provided in the technical proposal (& subsequent clarification, if any) **and Clarifications / Answers given to the BEC during the Presentation by the bidders**.

- MCGM reserves the right to alter minimum value if sufficient bidders didn't qualify.

4.20 Opening of Commercial Bid

- The Commercial bids shall not be opened by MCGM until the evaluation of the Technical Proposals has been completed.
- After the technical evaluation is completed and MCGM has issued its no objection (if applicable), MCGM shall inform the Bidders who have submitted proposals and cleared the technical evaluation, and shall notify those Bidders whose Proposals did not pass technical evaluation or were considered non responsive to the Bid Document and scope of work, that their Financial Proposals will not be opened.
- MCGM shall simultaneously notify in writing Bidders that have cleared the technical evaluation, the date, time and location for opening the Financial Proposals. The opening date should allow Bidders sufficient time to make arrangements for attending the opening. Bidders' attendance at the opening of Financial Proposals is optional.
- Financial Proposals shall be opened publicly in the presence of the Technically Qualified Bidders' representatives who choose to attend. The name of the Technically Qualified Bidders shall be read aloud.
- MCGM shall prepare a record of the bid opening that shall include, at a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, and the presence or absence of a bid security. The Bidders' representatives who are present shall be requested to sign the attendance sheet. A copy of the record shall be distributed to all Bidders.
- Authorisation letter in the name of the person attending bid opening meeting needs to be submitted on the letterhead of the Bidder during bid opening in the format specified in Annexure VII.
- The Commercial Bids will be evaluated by MCGM for completeness and accuracy. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail.
- The amount stated in the proposal form, adjusted in accordance with the above mentioned procedure, shall be considered as binding, unless it causes the overall proposal price to rise, in which case the proposal price shall govern.
- If the bidder does not accept the correction of errors, its bid will be rejected and the bid security may be forfeited.

- Activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, the Evaluation Committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial Proposal to the corrected quantity and correct the total Proposal cost.
- The bidder with lowest cost submitted (L1 rate) will get 100 % score for commercial bid evaluation.
- For all other bidders, the commercial score will be calculated using the following formula:

$$\text{Commercial Score of Bidder} = \frac{Total\ Cost\ of\ Lowest\ Bidder\ (L1)}{Total\ Cost\ of\ te\ Bidder\ (adjusted\ to\ 2\ decimals)} \times 100$$

Note: MCGM would communicate the Commercial Ranking of all qualified bidders after carrying out adjustments to the rates / prices quoted by the bidder on e-tendering system by applying weightages as detailed in the bid document. The results declared through the e-tendering system of MCGM after opening of the commercial bids do not include adjustments and hence do not necessarily reflect commercial ranking of bidders and hence shall be treated as void.

4.21 Selection Method

- The bidder scoring highest in the final score will be selected. The Final Score formula is as below:

$$\textit{Final Score} = (\textit{Technical Score of Bidder} \times 70\%) + (\textit{Commercial Score of Bidder} \times 30\%)$$

4.22 Firms Participation Criteria

- Firms with common Proprietor/partner or connected with one another either financially or as principal and agent or as master and servant or with proprietor/partners closely related to each other such as husband, wife, father/mother and minor son/daughter and brother/sister and minor brother/sister, shall not tender separately under different names for the same contract.
- If it is found that firms have tendered separately under different names for the same contract, all such tender(s) shall stand rejected and tender deposit of each such firm/establishment shall be forfeited. In addition, such firms/establishments shall be liable, at the discretion of the Municipal Commissioner, for further penal action including blacklisting.
- If it is found that close relatives (as described above) have uploaded separate tenders/quotations under different names of firms/establishments but with common address for such establishments/firms and/or if such establishments/ firms, though they have different addresses, are managed or governed by the same person/persons jointly or severally, such tenders shall be liable for action.
- If after awardding the contract it is found that the accepted tender violated any of the directions pertaining to participation as stated above, the contract shall be liable for cancellation at any time during its validity in addition to penal action against the contractors as well as related firm/establishment.

4.23 Rights to Accept/Reject any or all Proposals

- MCGM reserves the right to accept or reject any proposal, and to annul the bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected bidder or bidders of the grounds for MCGM's action.

4.24 Notifications of Award and Signing of Contract

- Prior to the expiration of the period of proposal validity, the bidders will be notified in writing or by fax or email that their proposal has been accepted.
- The notification of award will constitute the formation of the Contract. Upon the Bidder's executing the contract with MCGM, it will promptly notify each unsuccessful bidder and return their EMDs.
- At the time MCGM notifies the successful Bidders that their bid has been accepted, MCGM will send the Bidders the Proforma for Contract, incorporating all clauses/agreements between the parties. Within 30 days of receipt of the Contract, the successful Bidders shall sign and date the Contract and return it to MCGM. Draft Format of the contract is given in the Annexure IV.

4.25 Performance Bank Guarantee

- The Vendor shall at his own expense, deposit with department, within seven (7) working days of the notification of award of the contract or prior to signing of the contract, whichever is earlier, an unconditional and irrevocable Performance Bank Guarantee (PBG) from a list of approved banks (specified in Annexure V) as per the format given in this Bid Document, payable on demand, for the due performance and fulfilment of the contract by the bidder.
- This Performance Bank Guarantee will be for an amount equivalent to 10% of contract value. All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.
- Details on validity of the performance bank guarantee are specified under section 4.1 of this document. The Performance Bank Guarantee letter format can be found in the Annexure section of this document.
- The Performance Bank Guarantee may be discharged/ returned by department upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.
- In the event of the Bidder being unable to service the contract for whatever reason, department would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of department under the Contract in the matter, the proceeds of the PBG shall be payable to department as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. Department shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default.
- Department shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

4.26 Failure to agree with the Terms & Conditions of the Bid Document/Contract

- Failure of the Vendor to agree with the Terms & Conditions of the Bid Document/Contract shall constitute sufficient grounds for the annulment of the award of contract, in which event the contract may be awarded to the next most responsive bidder.

4.27 Terms and Conditions of the Tender

- Bidder is required to refer to the draft Contract Agreement, attached as Annexure in this Bid Document, for all the terms and conditions (including project timelines) to be adhered by the successful bidder during Project Implementation and Post implementation period. Please note that one needs to read the Contract Agreement as a whole document; and the Annexure mentioned there-in may not correspond to the Bid Document Annexure. Please refer to the Interpretation Section of the Agreement (Section 2 of draft agreement) for reference of the Annexure.

4.28 Legal & Stationery Charges

- As per Circular No. CA /FRG/61 dated 19.03.2013, the successful bidder will have to bear the legal & stationery charges at revised rates for preparing contract documents against each individual order as specified below:

Contract Value	Legal Charges + Stationery Charges
Up to Rs. 3,00,000/-	-
From Rs. 3,00,001/- To Rs. 20,00,000/-	Rs. 500/-
From Rs. 20,00,001/- To Rs. 1,00,00,000/-	Rs. 2000/-
From Rs. 1,00,00,001/- To Any limit	Rs. 5000/- (Maximum)

4.29 Stamp Duty

- The stamp duty payable for the contract shall be borne by the Service Provider IN WITNESS whereof the parties hereto have signed this on the day, month and year written as part of the agreement.
- As per the provision made in Article 63, Schedule I of Bombay Stamp Act 1958, stamp duty is payable for "works contract" that is to say, a contract for works and labor or services involving transfer of property in goods (whether as goods or in some other form) in its execution and includes a sub-contract, as under:

Contract Value	Stamp Duty
Up to Rs. 10,00,000/-	Rs. 100/-
From Rs. 10,00,001/- To Any Limit	Rs. 100/- plus Rs. 100 for every additional Rs. 1,00,000 above Rs. 10,00,000 (Maximum Rs. 5,00,000/-)

- The successful bidder shall enter into a contract agreement with MCGM within 30 days from the date of issue of Work Order and the same should be adjudicated for payment of Stamp Duty by the successful bidder.
- Further shortfall if any, in amount of stamp duty paid as against prescribed amount for the documents executed in Mumbai City & Mumbai Suburban District be recovered from the concerned work contractors and to deposit the deficit or unpaid Stamp Duty and penalty by two separate Demand Draft or Pay Order in favor of "Superintendent of Stamp, Mumbai" within 15 days from intimation thereof.
- All legal charges and incidental expenses in this respect shall be borne and paid by the successful bidder.

5 Project Background & Scope of Work

5.1 Objectives

In addition to the objectives above in the Introduction section, there are several department level objectives that would have to be addressed by the VTMS. The high level objectives for each of the department are as follows –

- **Solid Waste Management**
  - To manage routes and vehicles dynamically through an automated system.
  - Real time management of missed garbage collection points.
  - Efficient monitoring and management of waste collection bins.
  - To monitor and track the refuse weight by the refuse vehicle along the route

- Route optimization can be done which will help in reduction of trip time, fuel saving and serving more locations.
- To reduce the human intervention in monitoring process.
- To keep history of vehicle routes, attended sites and other details.
- To integrate the dumping ground and transfer station facilities with the centralised locations.
- To monitor Road Sweeping Vehicles.
- To ensure complete coverage of door to door and community collections.
- To monitor and track other MCGM vehicles under Solid Waste Management Dept. like Ambulances, Dumpers, Water Supply Vehicles etc.
- Reporting of vehicles, garbage collected and other SWM details to higher authorities from any location at any time.

- **SWD department**

  - To maintain a log of all vehicle allocated by the departments.
  - To monitor vehicle location and detail of what function of departments it is addressing.
  - To automate the process of manually maintaining the logs of vehicle allocations.
  - To better plan vehicle and its attached equipment usage and allocation
  - To manage vehicle maintenance schedules.

5.2 Background

From private sector to public sector, to productivity and back office procedures, technology has pervaded every aspect of the business world. Increased access to the global positioning system (GPS) has given enterprises a way to directly monitor and manage their most important assets.
MCGM, therefore, through one of its major IT initiatives, intends to have a **Vehicle Tracking and Monitoring System (VTMS)** to monitor, manage and control vehicles owned by them. The following are departments within MCGM having vehicle fleets needs to brought under the preview of Vehicle Tracking & Monitoring System –

- Solid Waste Management (SWM), &
- Strom Water Drainage (SWD),

To manage, maintain and monitor the vehicles is one of the major challenges for departments. Hence an introduction of a system which can track, help locate and monitor and help in managing the vehicles and the jobs carried out the by department people using the vehicle is an important requirement.

5.2.1 Existing Process for Vehicle Usage

Solid waste management

Solid Waste Management department is the biggest department in MCGM in terms of number of employees working for it. Mumbai has garbage production of around 6500 Tons per day and around 2500 Tons of construction and demolition (C&D) waste per day. MCGM operates a huge fleet of 1234 municipal and private vehicles for collection of waste, making approx. 1396 number of trips each day.

The table below depicts the fleet size for the Solid Waste Management in Mumbai. There are another around 1200+ vehicles which are owned and operated by contractors. The table below cover majorly the MCGM owned vehicle details for SWM with few contractual vehicles and another table for usage of each type of vehicle.

Fleet Count of solid waste management

S No.	Vehicle type	Number of vehicles
1	Refuse vehicles	407
2	Ambulances	76
3	Bus	44
4	Cars	72
5	Fire trucks	02
6	Jeep	211
7	Medical vans	07
8	Toilet trucks	85

S No.	Vehicle type	Number of vehicles
9	Tractors	16
10	Other trucks	116
11	Vans	131
12	All other vehicles	60
13	Dumpers (debris and Silt)	125
14	Transfer Station Vehicles	100
15	JCB	24
16	Dumpers (exit)	48
17	Bull dozers	25
18	Personal Carriers	230 (Contractual)
19	Pest Control Office vans	95 (Contractual)
20	Others	38 (Contractual)
	Total number of vehicles	**1912**

Fleet Usage of solid waste management

S No.	Vehicle type	Usage
1	Refuse vehicles	Collection & Transportation of Refuse in Wards
2	Ambulances	Transportation of patient from Hospital to Hospital
3	Bus	For transportation of Staff , Students etc.
4	Cars & Personal Carriers	For transportation of Staff
5	Fire trucks	For providing potable water to Octroi Naka, Ramabai Hospital, Bulldozer Garage, Gardening to Plants, Fire Fighting at Dumping, Cleaning of Bulldozer & Poclains etc.
6	Jeep	For transportation of Staff for day works
7	Medical vans	Transportation of patient from Hospital to Hospital
8	Toilet trucks	As per demand from Citizen
9	Tractors	For towing trailers & transportation of Mobile Toilets
10	Other trucks	For transportation of Material & Equipments.
11	Vans	Transportation of Breakdown attending Gang with materials from Garage to Break Down locations.
12	All other vehicles	For lifting equipments, bins and also for workers usage
13	Pest Control Office Vans	Transportation of staff, fogging machine, tools and equipments.

Table below shows all other additional details for non-mobile assets of solid waste management department.

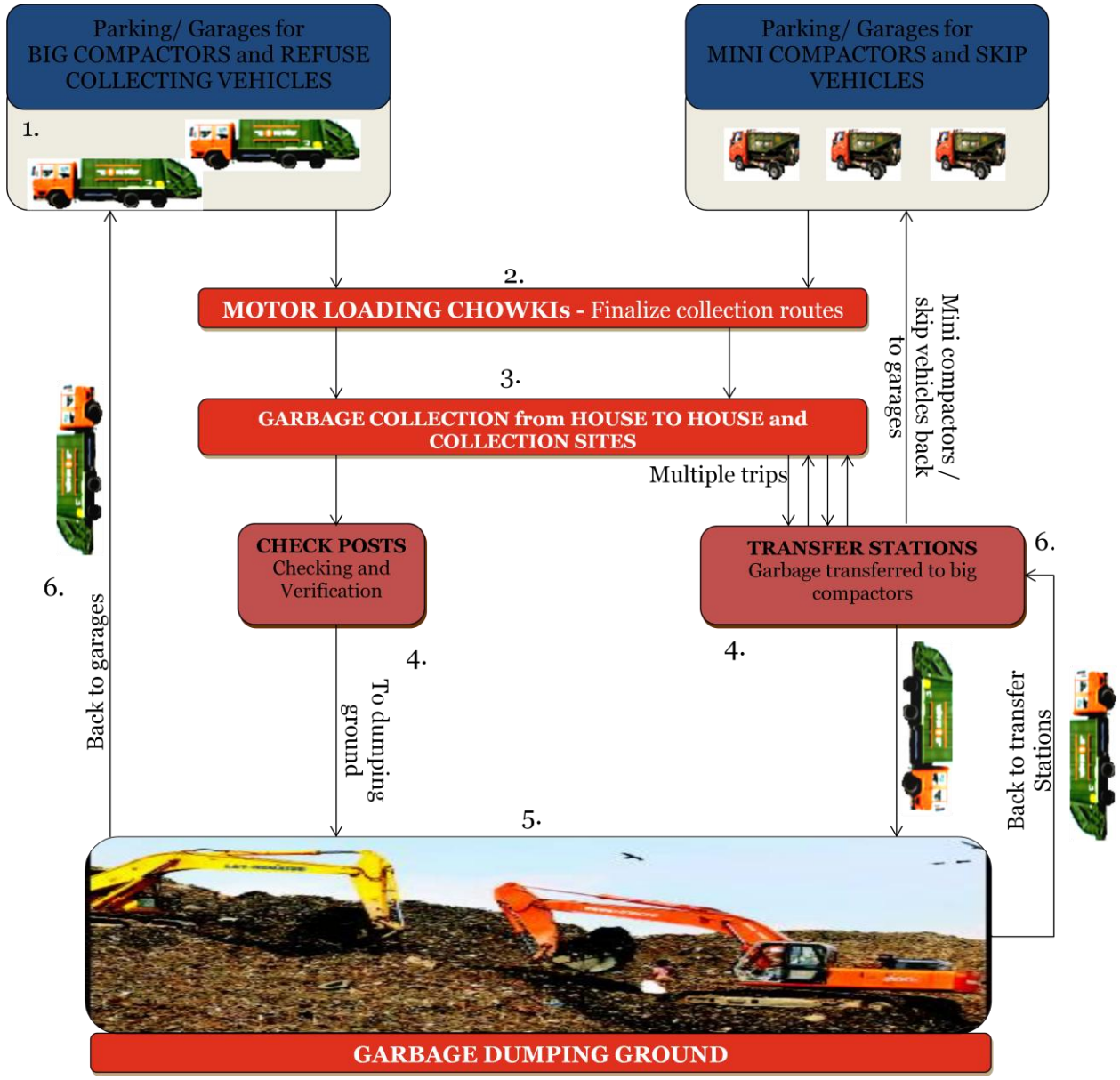
Additional details for SWM

S No.	Items	Number	Locations	Usage
1	Dumping grounds	3	Kanjur marg Deonar Mulund	Used for Dumping all collected garbage by the vehicles. Also known as Land fills
2	Transfer stations	4	Mahalaxmi Kurla Versova Gorai	A small garbage vehicle transfers the garbage to bigger vehicles at transfer stations.
3	Controlling offices	4	Worli Ghatkopar Santacruz	Controlling offices are the centralized offices to control activities within zones.
4	Garbage Bins	31000 House to house collection bins	House to house points (Eastern Suburbs, Western suburbs, City) from 24 wards	These are the bins located at the different location for disposing the garbage by citizen.
5	Collection points	4000	Community collection points (Eastern Suburbs, Western suburbs, City) from 24 wards	Collection points are community collection spot were multiple communities dispose their garbage.
6	Parking/ Garages	23	Eastern Suburbs Western suburbs City	Garages are the MCGM owned garages where the SWM vehicles are parked after their duties. There are certain parking areas as well where these vehicles are kept.

Total manpower

S No.	Areas	Number of employees
1	Sweepers and motor loaders	28821
2	Supervisory and admin staff	1592
	Total manpower employed	**30413**

Refuse Vehicle Daily Routes (SWM)



One of the primary vehicle type used under SWM is the refuse collecting vehicle. Its main activity is to collect and transport garbage / refuse from different locations allocated to them within wards and then dispose the garbage in the dumping grounds. There is defined process by the SWM department for the vehicle to collect refuse from various locations within wards. Described below is the process for refuse vehicle's operation in each ward for SWM.

1. **Parking / Garages**: The Refuse vehicles are parked when not in use at the MCGM garages which are located at **23 locations across wards**. Some vehicles are also parked in the parking.

2. **Motor Loading Chowkies**: The big compactors and refuse collecting vehicles start from the parking/garages and reach the motor loading chowkies where they **get the routes to be followed for the day**. A **log sheet** is prepared by a **Junior Overseer** at the Motor Loading Chowkies. This log sheet has the details of the route to be travelled by the refuse vehicle to collect the garbage for various collection points and community collection. This Log sheet is a **hard copy sheet and is given to the Mukadam** who accompanies the Refuse vehicle during the garbage collection process. A sample of Log sheet is attached in Annexure I. Also there are some vehicles which directly start the routes from the garages and do not go to the Motor Loading Chowkies for route allotments. These vehicles are generally small garbage collecting vehicles and allotment of routes to these vehicles is done from the garages only.

3. **Collection Process:** Following the route received by each vehicle, garbage is collected either from **Community collection points & from door to door**. The Mukadam accompanies the driver through

the route. The Mukadam keeps a check on the garbage collected at various locations as per the **Log Sheet** given to the Mukadam by the **Junior Overseer (JO) at the Chowky & Garages.**

4. **Checking, Verification and Transfer of Refuse:** Once the refuse is collected by the vehicles they come to check post. In the check posts, the **log sheets** updated by the Mukadam are **then verified to ensure** that the correct route was followed and proper garbage was collected in terms attending every collection point. Similarly, mini compactors and skip vehicles reach the **transfer stations** after the collection process, where the garbage is transferred from these mini compactors to the big compactors. The mini compactors perform multiple trips from the garbage collection sites to the transfer stations.

5. **Dumping the Refuse:** Once verified, these vehicles go to the **dumping grounds to dump the garbage**. Once the big compactors are properly loaded, they move to the dumping grounds. The weighing of the garbage is done at the dumping ground using the weigh bridges.

6. **Back to Garages & Transfer Stations:** Once the refuse is dumped at the dumping ground by the big vehicles like big compactors they go back to the Parking, SWM Garages & transfer Stations. The mini compactors and skip vehicles also travel back to the parking and garages after finishing number of trips and transferring the garbage in transfer stations. This entire job is carried out in multiple shifts. Each shift has multiple trips. Mini compactors make 2-3 visits per shift. However, Skip Vehicles make 4-7 trips per shift.

Storm Water Drainage (SWD) Department

There are other departments of MCGM like Main Sewer and Strom Water Drainage department also uses MCGM fleet for carrying out field maintenance activities. These vehicles are also used for complaint management purpose to go to site from where the complaints have been received. These vehicles have equipments mounted on it and these equipments are used for carrying out the field activities. The storm water system of Mumbai has as hierarchical network of road side surface drains(about 2000 km mainly in suburbs), under round drains and laterals (about 440 km in the island city), Major and Minor Nallahs (220km and 87 km respectively and 186 outfalls which discharge all the surface runoff into rivers and the Arabian sea.

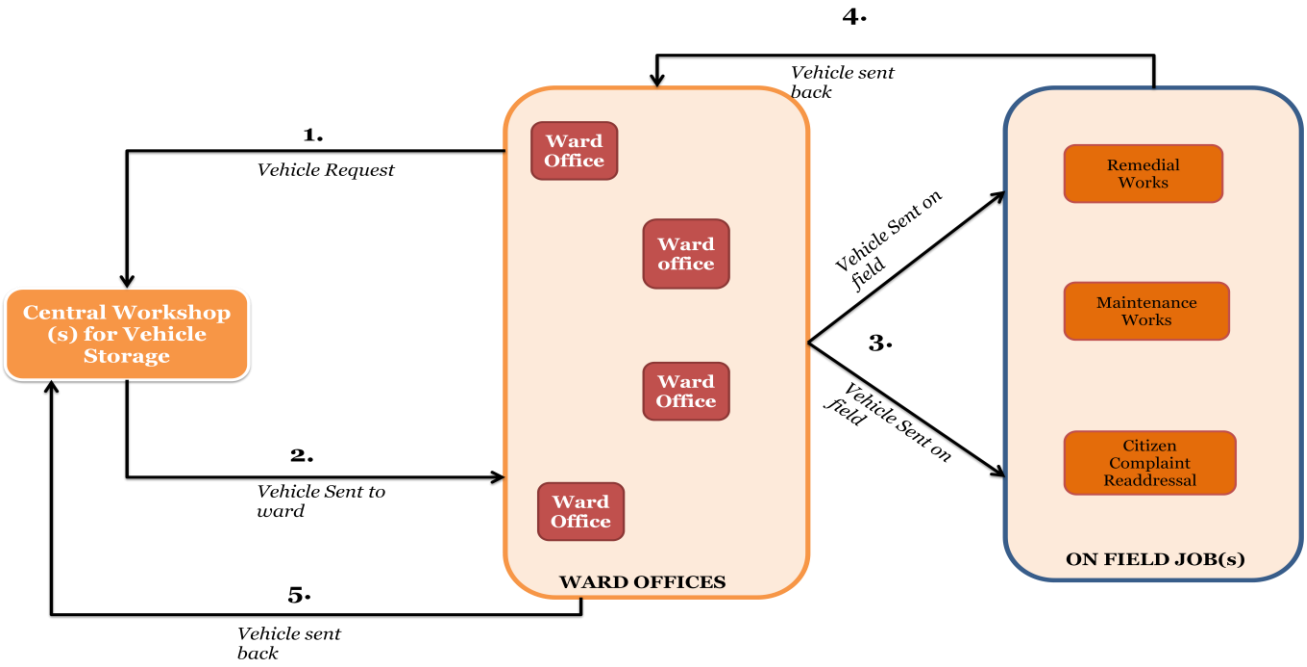
The table below also shows the vehicle type used by SWD departments and its count:

Vehicle Type Wise Count for SWD

S No.	Vehicle Type	Number of Vehicles
1	Firex Tankers	8
2	Suction Units	11
3	Suction Cum Jetting	2
4	Jetting Machine	4
5	L&T 851 Ladder Backhoe	1
6	Dumpers	2
7	Pitch Up Van	6
8	Tractors	2
19	Roadside Open Drain De-silting (RODD) Machines	30
10	Road Side Open Drain De-silting Machines with silt Container	1
11	Truck	1
12	Break Down Van	1
13	Dumper Placer	1
14	Robotic Multipurpose Excavator	1
	Total	**71**

The Storm water drainage department uses the vehicle for their departmental activities. Vehicles used by the department are mounted with equipments. This equipment mounted on vehicles is used for addressing citizen complaints, remedial works and maintenance jobs for concerned departments. Explained below is the usage of vehicles of SWD.

SWD Vehicle Routes



Explained below is the general process for vehicle movement for SWD:

1. As per the requirement from the field, scheduled maintenance and citizen complaints, the ward offices' SWD sends request to the central workshop(s) of respective departments for type and number of vehicles required. The SWD department workshop is in Dadar whereas Main Sewer keeps vehicles at 4 different locations across Mumbai.

2. These requests are then registered by the concerned officers from the department in workshop(s). A sheet for vehicle to be sent from workshop on site is prepared and published for the senior officers. Post which on the same day or next day as per the request, the vehicles are sent to the ward offices.

3. From ward offices, the vehicles are taken to carry out field jobs whether it is citizen complaint, emergency, maintenance work or remedial works. The usages of vehicle types are mentioned in table below.

4. After the tasks are carried out on the field, the vehicles are sent back to the ward offices where it is decided that the vehicle is required for a longer period or not. If the vehicle is not required it is sent back to the central division or workshop(s).

Fleet usage of SWD

Sr No.	Vehicle type	Usage
1	Firex Tankers	High pressure high discharge water jet of firex pump is used for cleaning/ flushing of storm water drains & also for removing the chokes from drains & culverts.
2	Suction Units	Used for de-silting of water entrances & manholes by sucking silt.

Sr No.	Vehicle type	Usage
4	Suction Cum Jetting	Used for de-silting of water entrances & manholes by sucking silt. Also pipe drains, Laterals are flushed with high pressure water jet. Jetting machine can also be used for removing of hard chokes from the pipe drains.
5	Jetting Machine	Jetting unit is used for flushing the drains, laterals, and also for removing hard chokes from drains & laterals.
6	L&T 851 Ladder Backhoe	Used for scrapping, levelling, loading of silt in dumpers. It is also used for de-silting of outfalls & removing silt from small nallas.
7	Dumpers	Used for transportation of silt, removed by suction units & dumped as SWD workshop to Mulund Dumping Ground.
8	Pitch Up Van	Used for transportation of material & tools to various working sites, Inspection of various ongoing works complaint stores. TO bring store items from central store. Dewater pumps are mounted during monsoon.
9	Tractors	Transporting of trolley mounted pumps & machineries to various sites.
10	Roadside Open Drain De-silting (RODD) Machines	De-silting of Road side open drains.
11	Road Side Open Drain De-silting Machines with silt Container	De-silting of Road side open drains.
12	Truck	Transportation of store materials, Manhole covers etc.
13	Break Down Van	For Towing Break Down Vehicles.
14	Dumper Placer	Transferring of silt removed by RODD machine having silt container.
15	Robotic Multipurpose Excavator	De-silting of major Nallahs in city & suburban Area. This is multipurpose machine & can be used in case of Disaster

5.2.2 Challenges faced at present

Due to large city area and huge population, there are issues being faced in the below mentioned daily processes.

- **Door to door collection**
  - No control whether all vehicles have visited 100% of the route or not.
  - No information that even if vehicles have visited the complete route, whether garbage was collected properly or not.
  - Difficulty in tracking the non-compliance to the schedules.
  - Difficulty in addressing citizen complaints.

- **Waste collection from Storage Bins**
  - Difficulty in monitoring actual pick up of waste from bins.
  - No control on Bin identification.
  - No control whether collected garbage is properly dumped at Dump yard or not.
  - Difficulty in preparing status reports as it is a manual process.

- **Limitations in Dump Yard Process**
  - Weighbridge systems are offline.
  - No tracking of a vehicle whether waste is dumped at dump yard after weight.
  - No proper reporting system of number of vehicles inside Dump Yard at particular moment.

The problems and issues with other departments of MCGM were also more or less similar. Although, they didn't have operational specific requirements, they saw the **need of vehicle tracking and monitoring in managing their fleets.**

Storm Water Drainage (SWD) Department also use the MCGM fleet for maintenance and handling issues /complaints related to the Storm Water Drains. This department currently have no system to track vehicles leading to inefficient operations. Locating these vehicles will act as a catalyst to quickly assign gangs for each type of maintenance or complaint. Also managing the maintenance schedules and vehicle allocation is an area of concern for this department.

All the above mentioned problems calls for immediate actions to have a robust solution of which shall not only cater the needs of locating a vehicle on real time basis but also helps in monitoring and managing the activities carried out by the departments using vehicles.

5.3 Proposed Solution

For the proposed solution, MCGM invites a bid for a web based automatic vehicle tracking and telemetric fleet management incorporating Global Positioning System (GPS), combined with GPRS/3G/GSM and digital map technology The major components of the solutions will be GPS based navigation device and its tracking ability, the Radio Frequency Identification and certain electronic sensors to monitor the activities carried out by the vehicle and department personnel using the vehicle.

5.4 Scope of Work

The scope of work for the selected implementing agency will include supply, installation and implementation of GPS based solution for web based automatic vehicle tracking and telemetric fleet management incorporating Global Positioning System (GPS), combined with GPRS or higher connectivity, and digital map technology. Along with that, it will also include the post implementation support and maintenance of Vehicle Tracking and Monitoring solution

The primary scope of work will include:

1. Supply and installation of GPS tracking devices in 1900+ vehicles of MCGM.
2. Geographically mapping of Refuse all the bin locations, SWM Garages, Dumping Grounds, Motor Loading Chowkies, SWM offices, SWD workshops, and ward offices on GIS Maps.
3. Supply and Installation of Radio Frequency Identification Tags in SWM Refuse bins and Refuse trucks.
4. Supply and Installation of Radio Frequency Identification Readers in SWM refuse vehicles, Transfer stations, and weighing bridges at the dumping grounds.
5. Supply and Installation of other sensors to monitor the system.
6. Sizing of Hardware, software and network devices required in the data Centres for using the Vehicle Tracking & Monitoring System.
7. Supply & Installation of hardware (servers), software and network devices required in the data Centres for using the Vehicle Tracking & Monitoring System.
8. Design, Development, Supply, and Deployment & Implementation of Web Based Application software (Vehicle Tracking System) integrated with GPS, RFID devices, weighbridge application, Existing GIS and SAP Fleet management and complaint management modules.

9. Maintenance of GPS & RFID devices along with added sensors during and after warranty period including the replacement of devices in cases of damage, new vehicle or any other change.
10. Maintenance of web based application for vehicle tracking and monitoring, during and after warranty period.
11. Provide resources for support, maintain and administering the system.
12. Provide training to MCGM resources for operating the tracking system.

5.4.1. Components of the proposed architecture

Details and role of the components of the expected solution architecture will be as follows:

Tracking Device

The GPS based tracking device has a powerful microprocessor based mechanism and a GPS receiver and a GSM/GPRS (SIM card) or higher module which obtains location information and relays it back to a central internet web server over mobile phone network. This keeps a track of the entire route of the vehicle. This information will include the location, the speed, the trip start and finish time, direction etc of the vehicle. The vehicle will be tracked using GPS (Global Positioning System) to find the location and time information at any instance of time. So reports will be generated about the time of collection of garbage, the route followed for the collection, the speed of the trucks. Also the information from the RFID reader and weight sensor will be fed to the tracking device.

RFID

4000 (Only community collection) bins of MCGM will be installed with an RFID tag to identify each object associated with the tag. Each tag will contain a unique identification code. This will help in the tracking of the bins individually. The RFID readers will be installed in each vehicle which will read the radio frequency signals of the tags installed on the bins from which the garbage is collected. The information pertaining to the collection of the garbage and the garbage bins being covered will be sent to the tracking device for creating the reports about the bins covered by the garbage collection vehicles giving the identification code of each bin being covered.

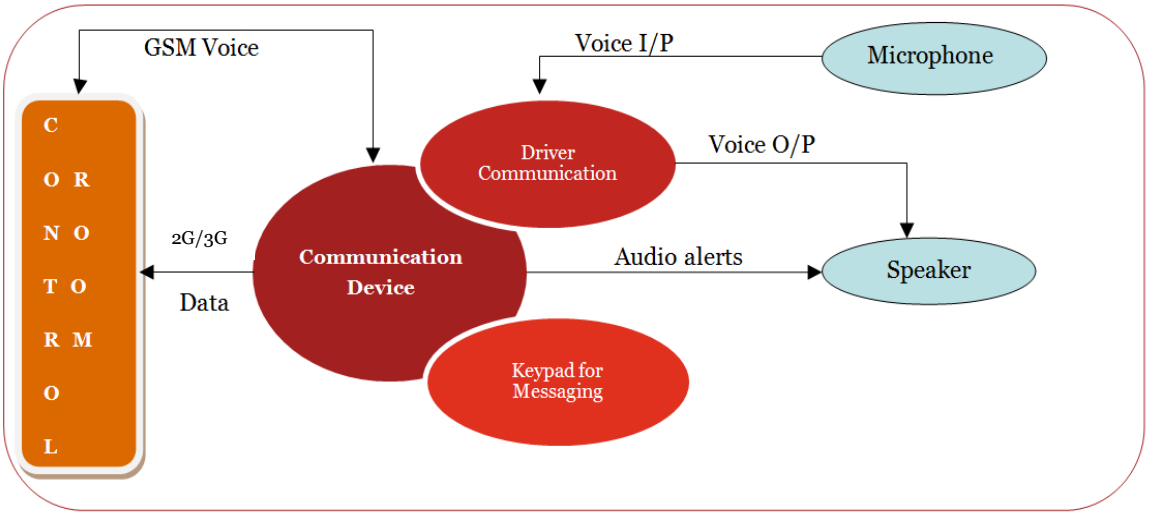
Information transmission

The information will be collected by the tracking device and this information will be sent to the tower using the GPRS signal for the transmission of the information. The GPRS tower will communicate with the data centre using the transfer protocol to transfer the information collected from the various vehicles. The MCGM data centre will be equipped with the database server and the application server to collect the data and to produce the reports. The central server will also have digital maps which will allow seeing MCGM user about the location of the vehicles on that map. The MCGM data centre will post the information over the internet which will then be visible to the MCGM users through mobiles or computers.

All the information will now be available over the internet and physical checking will be eliminated. The routing can now be given to the drivers using this system and tracking can be done automatically instead of having multiple check points.

Communication

One the most important task of this solution will be to communicate to the vehicles at any time through the communication system provided by the solution. This will mainly include voice communication and communication through messages. The vehicles will be installed with these communication devices along where keypad for typing messages and a microphone for sending voice messages will be available. Also there will be buttons for emergency alerts and SOS messages. The flow of communication is as shown below:



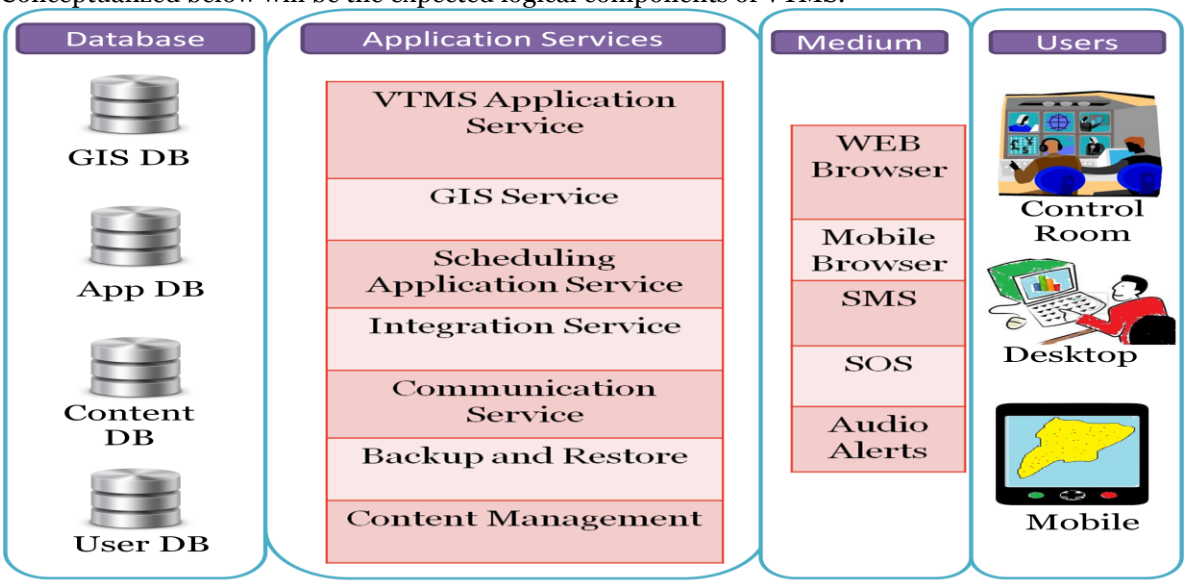
Control / Command Centre

The Implementing agency will have to setup a control room for the SWD department. The place and other details will be provided by the SWD department. Initially the command and control centre will be taken care of by the agency along with the MCGM users and simultaneous training will be given to the MCGM users for using the same. The command/control centre will be given 24x7 accesses to the VTMS solution where all the MCGM officers will be able to track, monitor and manage the vehicles as well the jobs to be carried out. Allocation of jobs, reporting emergencies, real time and dynamic work allocation etc. will be done from the control room. The entire reporting, printing and publishing task related to VTMS can be carried out here. The control room will also have authorities to give access of VTMS to other users based on role and tasks to be carried out.

Data Centre

The data centre premises will have all the hardware and servers to be used for the VTMS solution. This will act as a hub for storing, managing, maintaining and backing up all the data that is received from the vehicles, RFID readers, MCGM offices, control rooms and devices using VTMS. All the databases and services will be hosted at the data centre and hence it is an integral part of the entire solution. The Implementing agency shall carry out a detailed sizing of the hardware and software that is required for hosting the VTMS solution at data centre. The Implementing agency shall also a carry out a network sizing and requirement of the network devices required for the implementation of VTMS solution. The implementing agency shall also supply and install the required Hardware, Software & Network devices for the hosting of VTMS solution. The agency shall also help the MCGM – IT Facility Management (FMS) team for guiding over the installation of hardware, software and maintenance of the same.

Conceptualized below will be the expected logical components of VTMS.



x

- Geocoding / surveying of the following components shall be done by the implementing agency:

a. Garbage Collection points
b. Bin locations
c. Departmental Offices
d. Dumping grounds
e. Transfer stations
f. Motor loading chowkies
g. Department workshops
h. Ward offices
i. Others (as per MCGM request)

The accuracy of these locations should be 3 to 5 meters. The implementing agency shall use these locations over the maps and shall deliver the same to MCGM in formats like ESRI formats or any other standard GIS format.

5.4.2. Operational Scenarios

To understand how the proposed solution will be used in daily operations of the concerned departments, below shown diagrams are the comparisons with the previously mentioned usage of the vehicles.

Solid Waste Management

1. **Parking / Garages**: At any point of time, when the vehicles are in idle condition or parked in the garages / parking, the Vehicle Tracking & Monitoring System will show the location of the vehicles at the Parking and garages. The status of the vehicle will not be in motion. In case a vehicle is not parked in a garage and not parked in proper parking, the supervisor can easily identify the location. Also if a dynamic geo fence is applied on the garage boundaries then every refuse vehicle going out of the fence will generate a report / alert on the same. The garages will also allocate routes to some of the vehicles which will small vehicles. Hence the VTMS solution will be available at the garages as well to the authenticated users. The type of vehicles that will directly go on allocated tasks will be Stationary Vehicles & Non-Refuse Vehicles.

2. **Motor Loading Chowkies**: The VTMS will have functionalities that will be available at the motor loading chowkies & Garages. Those are:

    a. Real time monitoring of vehicles through system.

    b. Generate automated log sheet through VTMS.

    c. Create geo-fence for collection point / bin / office locations and geo-routes for vehicles.

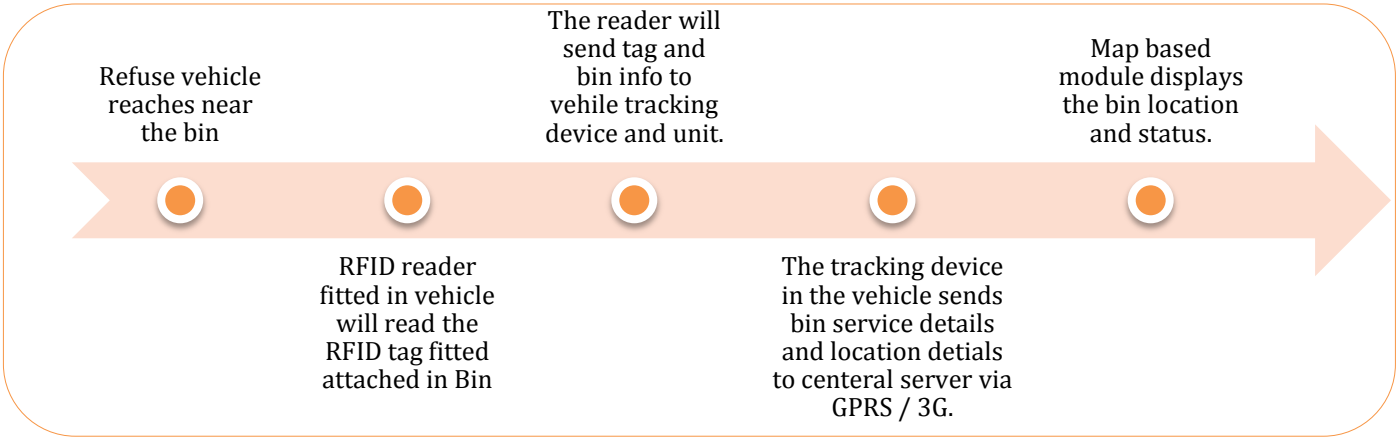
    d. Transfer log sheet information to Check Posts.

    e. Monitor vehicle location and bin attending status.

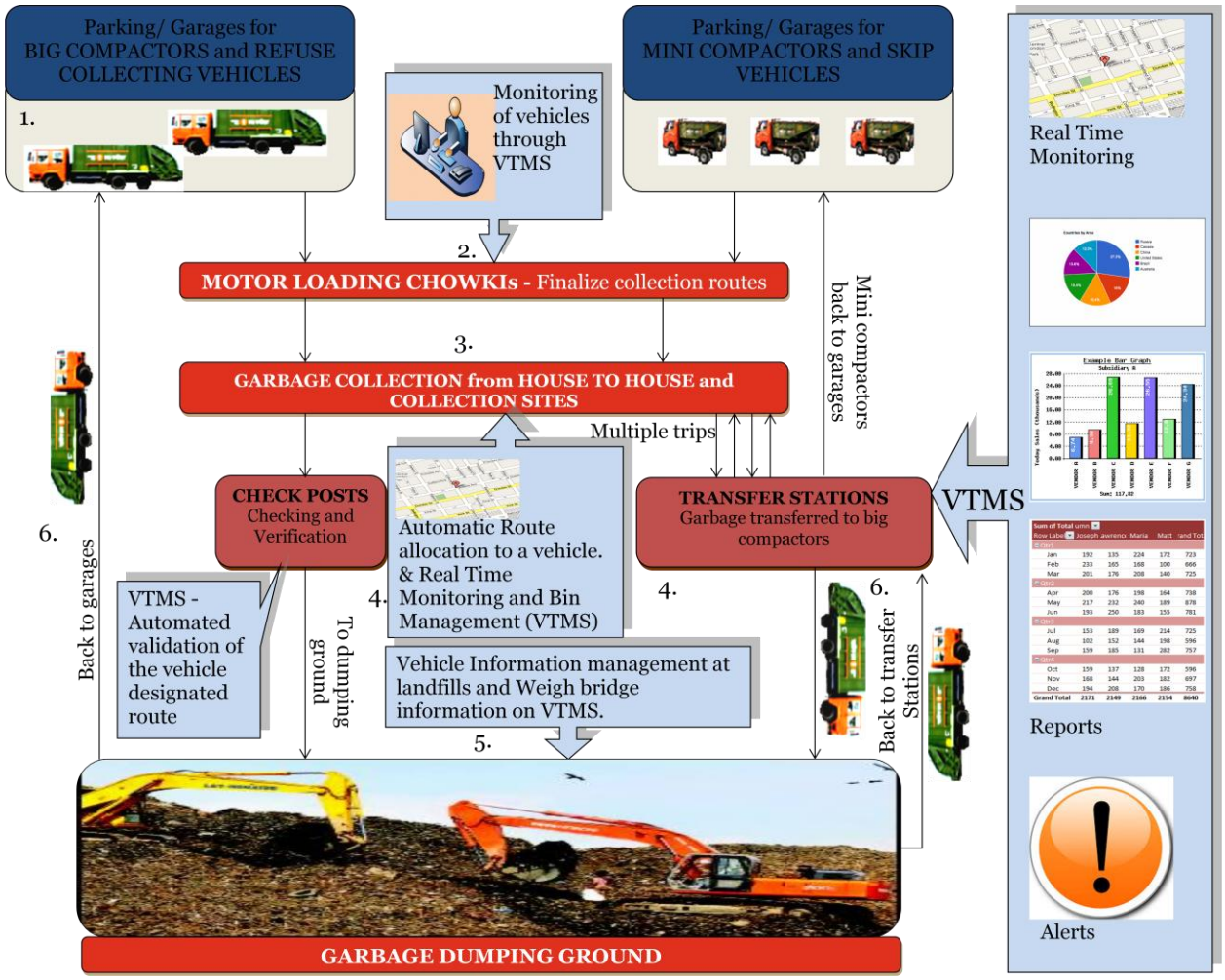
3. **Collection Process:** One of the major functionality that shall be addressed by the VTMS is automatic route allocation for each refuse vehicle. The routes are fixed but are not assigned not vehicle beforehand. Instead, the route will be assigned to each vehicle dynamically when the refuse vehicle covers defined percentage of spots of a route. Which means if the threshold value is 20 % and the refuse vehicle covers 20 collection points of route having 100 collection point, the same route will allocated in the system automatically.

    While the refuse vehicles are moving along the routes, the tacking device in the vehicle will keep on generating location details in every few seconds and the same will be visible to monitoring authorities. Also every time a garbage bin comes under the periphery of the RFID reader installed in the vehicles, it will generate date, time and bin identification details with the help of RFID tags attached in the bins. The same along with location of the vehicle will be sent to the VTMS browser application and

will be recorded as attended location and bin. The RFID working is explained below:



Along with the web based solution for vehicle tracking and telemetric fleet management, this solution will also include provision of monitoring the location of garbage collection with help of Geo-fencing functionality of the inbuilt solution. This will notify & highlight every time a vehicle enters a pre defined geo-fence area built around an already mapped garbage collection point. The system based on the halt duration at the garbage collection point, will consider that all the refuse bins already assigned to that garbage collection point is attended. The system will also have provision to verify and correct unattended refuse bin based on the system information and the inputs from the field in charge. The system hence will monitor the vehicle attending all the allocated garbage collection spots along a route and generate notifications and reports.



4. **Checking, Verification and Transfer of Refuse**: At the check posts and transfer station, following task will be carried out through VTMS:

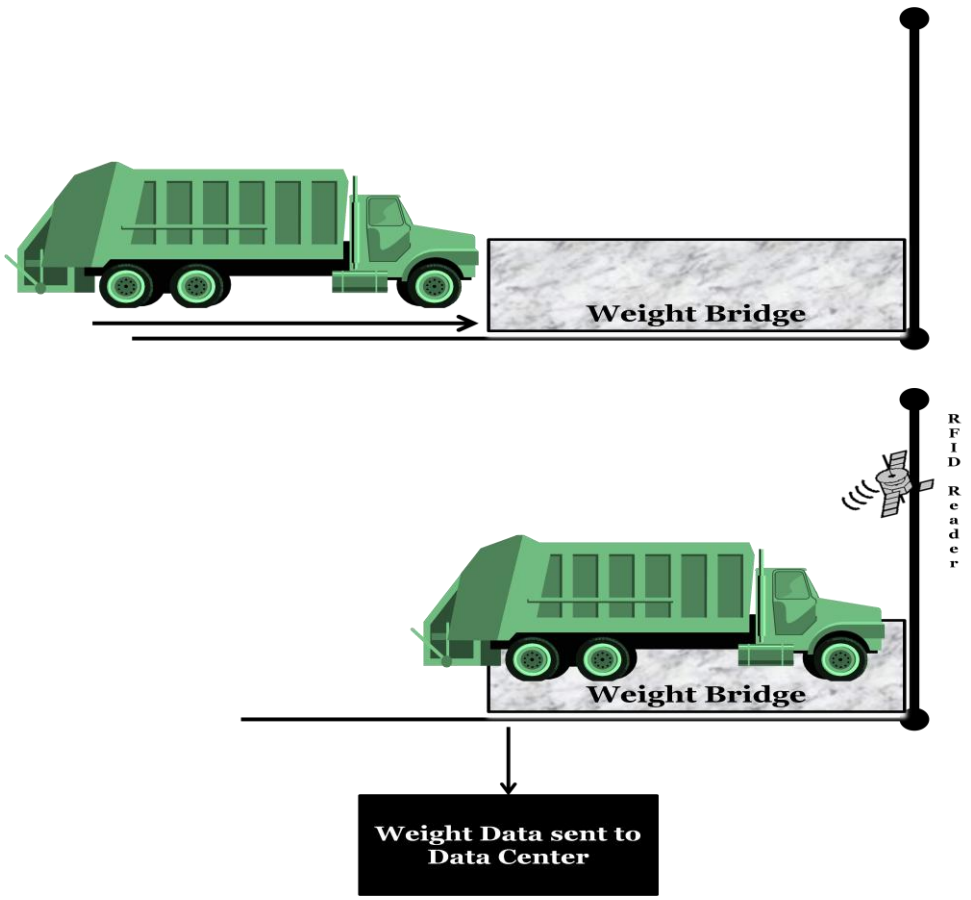
    a. System based validation of automated log sheet Vs Bin Attended and Route followed information.

    b. Verification of discrepancies if any.

    c. Information and allocation of transferred garbage vehicle and its route till dumping ground.

    d. The Weigh bridges will be installed at the transfer stations. At present MCGM has Weigh Bridge at the Mahalaxmi Transfer Station. However in future it may get added for other transfer station locations. The Transfer Station weigh bridges should also have the RFID readers and trucks, skip vehicles and mini compactors will read through RFID tag attached on them and transferring refuse at transfer stations. The details of integration of weigh bridge data is explained in below section.

5. **Dumping the Refuse**: : At the dumping ground the vehicle will register itself in the system through the RFID tags attached on it whenever it comes on the Weigh Bridge and in the periphery of the RFID reader on the weigh bridge. The weighbridge and the weighbridge data will be fetched automatically sent to the data centre to make operator independent weighbridge operations. So the weight of the garbage being carried by a particular truck can be generated to great accuracy now. The data of the weight being carried by individual trucks can be updated easily. The weighbridge will be available at both entry and exit gates of the dumping ground; hence the information of the loaded and unloaded bridge will be recorded in the system.
   The integration of the weigh bridge is as below:



6. **Back to Garages**: Once the refuse is dumped at the dumping ground by the big vehicles like big compactors they go back to the Parking and SWM Garages. The mini compactors and skip vehicles also travel back to the parking and garages after finishing number of trips and transferring the garbage in transfer stations. This entire job is carried out in multiple shifts.

Storm Water Drainage Department

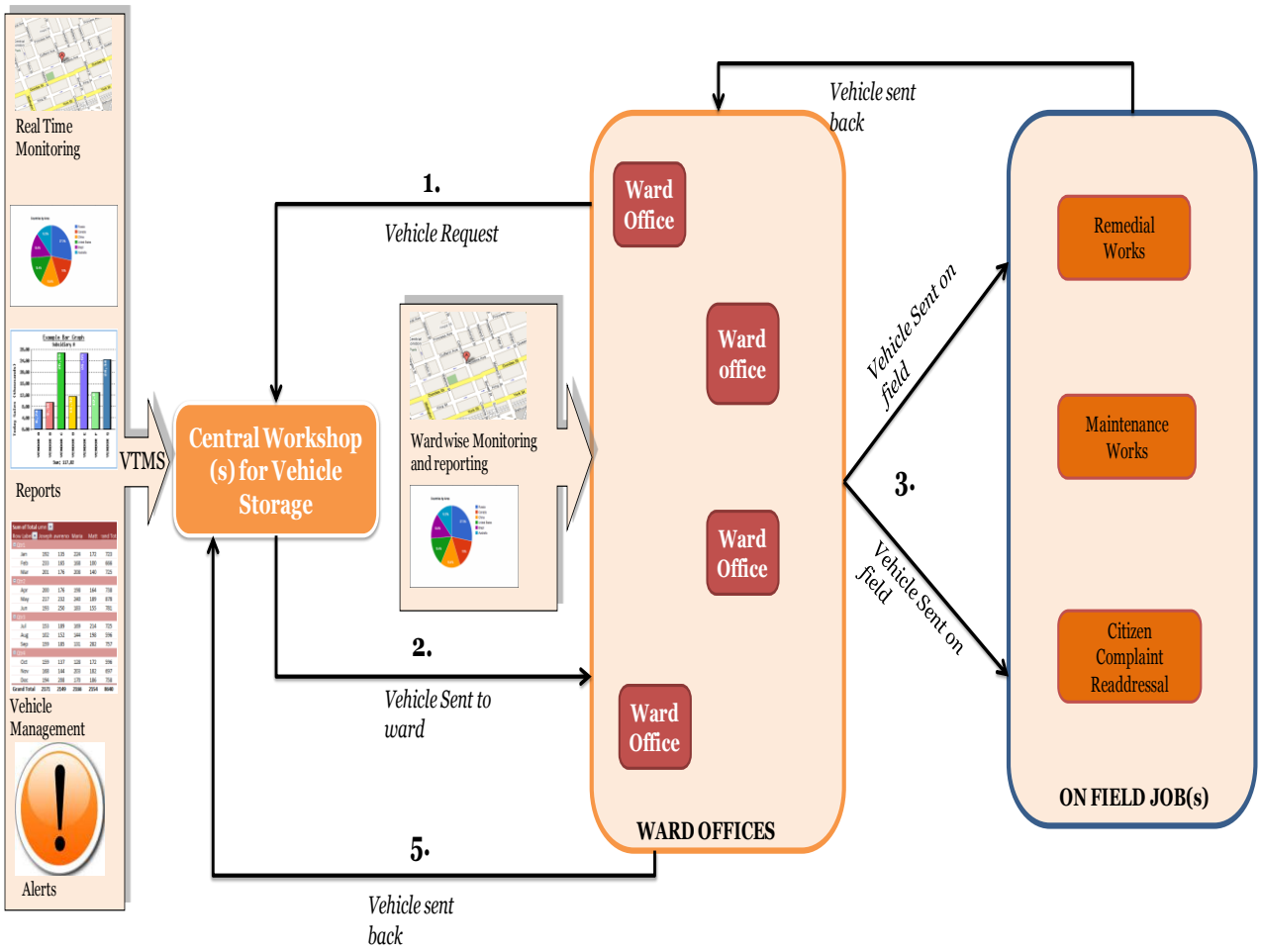
The operational scenario will mainly include the department vehicle tracking as well as the vehicle management. It is briefly explained as below:

1. The central offices / Workshop will manage the vehicle list, timings, routes using VTMS module for SWD as per the request sent by the wards. The central office will also monitor and track the vehicles location and usage on real time basis.

2. Once the vehicle are sent to the ward offices, the same list of vehicle usage and routes defined by the central office can be shared by the ward offices restricted to ward specific details and also vice versa using VTMS. Also the ward office can also monitor the location of vehicles on real time basis as well they can better plan the vehicle allocation to carry out task in nearby areas.

3. The on-field vehicles can communicate with the ward offices as well the central offices / workshop(s) using the data terminal installed in the vehicles.

4. The maintenance schedules, vehicle end of life and other vehicle related details can also be managed and kept as history by the official of the department on VTMS.



5.4.3. Pilot for Weight Sensor

Monitoring and gathering the statistics on the weight gathered by the refuse vehicles is also one of the vital requirements of the solid waste management department of MCGM. Additionally the de-silting vehicles used by the Storm Water Drainage department also require weight data lifted by the vehicles. To cater to these needs, it is required to have an added sensor for collecting the refuse weight at every collection point along the route of a refuse vehicle. These sensors can be load cells or weight sensors fitted in the refuse vehicles and de-silting vehicles of MCGM. To carry out a proper study of usage of weight sensors in MCGM vehicles for calculating real time weight, it is proposed to have pilot study of using weight sensors or load cells in the

MCGM vehicles for collecting the weight data and analysing the same. The features of this system shall be:

- The weight sensors or the load cells will be fitted in 20 refuse collecting vehicles and 5 de- silting vehicles.
- These sensors shall be place under the back side of the refuse loading vehicles in such a way that it gathers the divided load in the refuse container. Which means it can be placed in four corners of the container or horizontally across the container.
- The sensor shall gather data at every collection point and transfer the same to the Inside Vehicle Unit to transfer data to the data centre.
- The same weight data shall then be matched with the overall weight of a refuse vehicle reaching the weigh bridge of the Dumping ground after finishing the designated route.
- The Vehicle Tracking and Monitoring Application shall generate various reports using the weight data stored by vehicles along a designated route.
- The sensors shall also notify any major change or deviation in the weight along the refuse collection route.

5.4.4. Functional Specifications

The solution that will be proved by the selected bidder will have the below mentioned indicative functional requirements. However detailed functional requirement will have to be prepared by the selected bidders after the award of the project by carrying out a details requirement gathering activity with the concerned MCGM department.

Functionality	Integration required with
Common Functional Requirements	
Dash board	
Within each department module, Dashboard Module should give a quick and easy view to know overall fleet status on real time basis. It should display status information of all vehicles i.e. Running, Idle or Standby. The Dashboard view should provide the following information: 1. Each department separate authentication based vehicle tracking module. 2. Within department section, there shall be a an aggregated view of all the department specific vehicles, its location, movement and other real time details shall be available. 3. There should be a facility to club the area specific and category specific vehicles in groups. 4. Zone name, Ward Name, Vehicle No, Vehicle Type, Current Location & Last Updated Date & Time of each vehicle. 5. It should give alert message if GPS device gets disconnected from a vehicle. 6. Dashboard should have search parameter where different searches i.e. Vehicle Number wise, Zone & Ward wise, running / idle / standby vehicle wise and “No communication” wise searches can be done. 7. It should also give an indication regarding the running speed of the vehicle i.e. Normal speed, Alarming speed and above Alarming speed. 8. There should be provision to see a particular vehicle on map.	
Map Based Analysis	

9. Creating buffers along the emergency site, working site. 10. Creating Geo-fence Dynamically and sending alerts in case of vehicle moves out of the geo fence. 11. Halt time within the geo-fences. 12. Geofences to be created at every bin and station location. 13. Geo routing the assigned routes and sending alerts in case of route deviation. 14. The Map should have facility to flash or show messages sent by the vehicle communication unit.	GIS
Vehicle Maintenance	
15. Maintenance of vehicle data regarding the end of life, maintenance schedule. 16. History data for vehicle maintenance schedule. 17. Details of vehicle purchase and other registrations.	SAP – Fleet Management
Functional Requirements - SWM	
A] Area Details	
18. Area information (Zone / Ward / Colony / Society) 19. Population details 20. Volume of the Solid waste which includes Wet & Dry waste (Recycled & Non Recycled) 21. Resources required 22. Collection procedure (i.e. Primary : House to House & Secondary : Community Bin to Garbage transport centre or mix)	
B] Garbage Collection Scheduling	
23. Assign SWM Vehicles to pick-up the Garbage. Category wise assignment like A: Highly in demand, B: Medium, C: Low Demand. 24. Assignment of dynamic routes using the vehicle initial route and bins attended. 25. Location-wise assignment of Sanitation Staff 26. Scheduling of garbage collection and cleaning activities with the objective of maximizing citizen friendliness on the one hand and optimum use of resources on the other.	GIS
C] Primary Garbage Collection & Disposal	
27. Record the volume of garbage collected and disposed on a daily basis. Source segregation like Quantum of wet waste collected with further segregation for vermin culture, Bio dispose can be kept on Monthly / Yearly basis. The same can be used for RV benefit. 28. Linkage with Garbage Bins / Land Fill Sites, in case of Citizen Grievance 29. Keeping certain Checks as per environmental regulations, like minimum frequency of lifting garbage etc.	Weigh Bridge Software
MIS	

30. Monitor the deployment of pickup trucks and personnel based on the schedule originally drawn. 31. Info on the use of Land Fill Sites 32. Land fill site: How much garbage received? 33. Land fill site: How much as per target recycled? 34. Alerts if the use of Land Fill sites is above some thresh-hold 35. Generation of registers like: Site Register (landfills), vehicle register etc. 36. SWM Contract Wise Status Reports, Site Wise Progress Summary, Contractor wise Performance Analysis, etc. Comparison of expenditure on SWM activities over different geographical areas, years, agencies, etc 37. Show all Point Of Interests 38. Stoppage Report (Halt Start Time, End Time, Halt Location, and total Halt time for any selected vehicle for specific date) 39. Vehicle History (Total distance covered, alerts, violations, average speed, high speed between start and end date (on weekly and monthly basis) for Vehicle). 40. Reports of Ward Wise Weight Reports. 41. Reports for RTS wise Weight Reports.	
Functional Requirements – SWD	
A] Vehicle Management	
42. Manage every day vehicle roster for all department vehicles. 43. Changing and updating the existing vehicle rosters. 44. Geographic details of type wise vehicles on real time basis. 45. Option for updating vehicle availability details.	SAP – Fleet Management
B] Resolving Site Locations	
46. Locating maintenance sites on the maps. 47. Locating nearest ward office and central workshop(s). 48. Locating nearest amenities.	GIS
C] MIS	
49. Reports on type wise, zone wise and ward wise vehicle allocations. 50. Type wise vehicle availability in the workshop(s). 51. History details of vehicles allocated to each ward on date and area parameters. 52. Alert reports based on the vehicles reaching end of life as per the RTO. 53. Weekly, Monthly and Annual reports for vehicles and its activities.	

5.4.5. Hardware Installation & Hosting

The solution developed for vehicle tracking system will have to be hosted at MCGM premises at MCGM Data Centre. The selected bidder will have to supply the hardware and software required for the hosting of the solution at Data Centre. The software used in the hosted environment such as Operating System, database, antivirus, etc. should also be platform independent preferably. However the selected bidder will have to understand from the MCGM – IT department about the standard technology stack followed by MCGM.

Also apart from the hardware & software that will be used at the data centre, there will be set of hardware devices that will be supplied and installed by the selected bidder in the vehicles as well as at department locations. The list of the same is as below. The list below is indicative and will have to be confirmed by the bidder with the department at the time of actual supply and installations.

Considerations for devices installation:

a. The inside vehicle GPS device should be **tamper proof**. Also it shall be installed in the dashboard of the vehicle. The GPS device shall also **generate notifications** in case of any tampering activity.
b. The others sensors shall also be able to generate tampering notifications.
c. The GPS device should not use the **inside vehicle battery** to an extent that it drains out the vehicle battery. It should have a facility to go in a standby mode. The bidder should arrange **added battery** in case of the GPS device and sensors are using more battery from the vehicle. The bidder should also arrange for charging and maintenance of the added battery.
d. The RFID readers should be tamper proof. The reader should also generate notifications in case of any tampering activity. The readers should be installed in the vehicle such that the garbage bins are at the minimum distance at the time of garbage lifting. The **location of the fitting of RFID readers** should be finalised only after consultation and proper approval of the MCGM – SWM officials.
e. The RFID tags will be installed in both **metal bins as well as other non metal bins**. It is suggested that the RFID tags should be installed on the bins **with screw rivets** without damaging the garbage bin. However other suggestions from the selected bidder can be considered for installation method if the suggested method / approach help in creating no damage of the bin and avoids tampering / stealing of RFID tags from the bins.
f. RFID tags should be fixed on the garbage bins in such a way that the RFID reader in the garbage vehicle reads the RFID tag with a minimum distance at the time of lifting the garbage.

Sr. No.	Component	SWM	SWD	Installations Count
1	GPS Tracking Device	1912	71	1983
2	Temperature Sensor	9 (Asphalt Vehicles)	-	9
3	Fuel Expert	407	71	519
4	Data terminal without Screen	1912	71	1983
5	Weight Sensors	20	5	25
6	RFID readers	420	-	420
7	RFID tags	4000	-	4000

5.4.6. SRS Creation

Post understanding and fixing the short comings mentioned by the departments, the selected bidder will do the installation of devices across all applicable departments and their vehicles. Simultaneously, requirement gatherings from all concerned departments shall be done for customization of the inbuilt solution. Post the formulation of a detailed Software Requirement Specification in a proper document and approval of the same from departments, the customization of the application shall commence.

5.4.7. User Acceptance

Setting up of the devices, development and customization will follow with a comprehensive testing of the each functions identified by the user departments in the SRS. This detailed testing of the system will be done by the user department's identified personnel using the internal functional testing details of the development team as well by doing a comparison of the initial use case as per the functional requirement and the actual functionality delivered. The necessary and mandatory changes derived out of the UAT will then be incorporated and will taken for another round of focused testing by the users. A successful UAT approval will then move the job to deployment and configurations for the system in live environment.

5.4.8. Pilot Run

For better understanding and initial learning, the selected bidder will have to carry out a pilot run which will include hardware installation on certain focused vehicles for a focused ward or area. The key learning and observations are then shall be taken into the consideration and to be implemented in the solution. This will also help in checking the accuracy working adaptability of the hardware devices. This phase will focus on installing hardware devices like GPS based tracking device, RFID Tags, RFID reader, Data Terminal, and other sensors on some selected vehicles for each department. The details are as below:

- **Solid Waste Management Department** will have installation for all vehicles and routes for one ward. The RFID tags will be fitted in all the community collection bins of the same ward.

- **Storm Water Drains** will have setup in vehicles for one ward.

- The System will be kept up & running parallel with the actual setup and developments for VTMS. The RFID tags and readers installed in the pilot ward will be kept up running in the solution for 3 months period. In the mean time other devices can be installed in rest of the vehicles. Based on the inputs from the users, field personnel and solution on RFID reader and tags performance, the further instalment and procurement of the rest of the RFID reader and tags instalments shall be carried out. If any problems are faced during the pilot run, the selected bidder should come up with definite solutions and work around for issues faced.

- MCGM wants to further install the RFID tags in all the bins including house to house collection bins for which the count may go up to 31000. This will be done only after the review of performance of the present RFID tags in the community bins. Hence the present project scope only includes the installation of RFID tags in community collection bins (4000). The bidder will have to quote prices for RFID tags for 4000 bins as a part of fixed component. And bidders will also have to quote prices for the variable component of RFID tags for 31000 bins.

5.4.9. Roles & Responsibilities

During the period of the project execution and maintenance, there will be many stakeholders who will have different roles and responsibilities. The following points give an insight on the roles and responsibilities.

- VTMS Implementing agency: Will be responsible for supply, installation, commissioning & maintenance of all the hardware, devices & software required for deploying Vehicle Tracking & Monitoring Solution.
- MCGM – IT Department: will be support the implementing agency in giving support in terms of data centre space, coordinating between VTMS implementing agency, FMS provider, SAP vendor, GIS vendor and DR provider. IT will also play a role in keeping track on the quality of the deliverables, requirement of the user departments, monitoring of SLAs and approvals in the deliverables given by the implementing agency. IT department will also release the payments of the implementing agency based on the approvals given by the user departments and SLAs evaluated.
- MCGM IT – SAP Post Implementation Support Agency – The SAP post implementation support agency will support the VTMS implementing agency for integration of SAP Fleet Management module with VTMS.
- MCGM IT – GIS system integrator – The GIS system integrator will help in getting the map services created and importing the GIS data over the GIS base map maintained by them.
- Weigh Bridge Maintenance vendor - The weigh bridge maintaining vendor will help the VTMS implementing agency in having the integration of weigh bridge software with the VTMS solution.
- User Departments – Will help the VTMS implementing agency regarding the information related to their own departments in requirement gathering, installation, commissioning, training and approvals. The approvals of the payment milestones will be confirmed by the user department to the MCGM-IT department after evaluating the SLAs.
- MCGM IT- Consultant – The IT consultant will play an active role in monitoring and validating the work carried out by the implementing agency. The IT consultant will also provide expert opinion on issues faced by the departments regarding the VTMS solution.

5.4.10. Maintenance & Support

The selected bidder is expected to give support and maintenance services for 5 years post the implementation of the VTMS. The support stage after the successful UAT of the application and complete installation will include mainly the warranty period and post that support and maintenance which will be a total of 5 years. Since the solution is a hosted one, the online support for the application shall be 24x7 available for any application related queries. As long as the devices are concerned, they would require timely maintenance and requirement based support for the same based on the service levels finalized. In case of new vehicle addition or change of an old vehicle, the necessary installations, Integration with the application shall be done during this phase. The operational support will have to ensure that the VTMS solution is functioning as intended and attending to all problems associated in operation of the application system.

- Hardware Upgrades & Software Updates

  Any required version/Software /Hardware upgrades, patch management etc. will be the responsibility of the selected bidder for the entire contract period at no extra cost to MCGM. The required upgrades for the entire stack has to be implemented within 6 months of release/general availability including –

  1. Supply, installation and maintenance of the Updated/Upgraded versions of software.
  2. Supply the consumables and any other goods or articles required from time to time for continued functional operations of VTMS systems and service centres.
  3. Rectification of Bugs/ defects if any.
  4. Fine tuning of the application, as and when required.
  5. Maintenance of the application.
  6. Reinstallation of software/application/database whenever required.
  7. Installation of devices in the new vehicles.
  8. Maintenance of in vehicle devices in case of failures /damages.
  9. Addition of RFID tags in new and replaced bins.

- Health Checks and MIS Reports

  The selected bidder will also be responsible for performing regular health checks to ensure optimum performance of the system including software, all hardware devices, database, etc. The selected bidder should provide regular health check status reports and MIS reports to MCGM.

- Security Audits

  The selected bidder shall conduct vulnerability and penetration test (from third party cert-in empanelled auditor) on the proposed VTMS solution in every 3 months and reports for the same should be shared with MCGM. The service provider needs to update the system in response to any adverse findings in the report, without any additional cost to MCGM. MCGM may also depute auditors to conduct security check / vulnerability test / penetration test of the VTMS.

- Incident Management

  The selected bidder shall provide an incident tracking system via a web interface / mail / IVR; available in real-time which will issue a trouble ticket once a complaint is booked successfully. The solution provider shall ensure that if any tickets pertain to action from their end, these calls are fully responded by the professional team. The solution provider needs to maintain a separate log book for the issues reported by MCGM for the contract period. The updated status of each ticket should be made available on a web based/incident management system for tracking. This trouble ticket system shall generate a monthly/quarterly/half yearly/yearly reports.

- Support to FMS

  The selected bidder shall support the FMS team of MCGM for the following activities:

  1. Installing, configuring and support of VTMS clients in all communication/computing devices for identified users and providing telephonic/remote support to other users.
  2. Co-ordinating issues for timely resolution.
  3. Knowledge Transfer of all activities performed as part of installation, configuration and setup.

- Support to Disaster Recovery Provider

  The selected bidder shall support the DR provider team of MCGM for the following activities:

  1. Helping in creating Business Continuity plan for VTMS solution for MCGM.
  2. Helping the DR provider with database and hardware / software details for VTMS solution.

5.4.11. Training

Integral to the change management process is the training of users on various aspects of the vehicle tracking system.

The vendor would be expected to conduct workshops with the following points in mind –

- Demonstrate the benefits and functionality of the VTMS focusing on the business process. This would include training the man power (both existing and new) on the usage of vehicle tracking software,

distribution of user guides and manuals and the potential of the software in performing daily tasks more effectively and efficiently.

- Planning and devising a training program to ensure transition from manual to the new system is seamless.
- Develop and implement a standard data collection procedure and template spreadsheets to facilitate and standardize how vehicle tracking data is to be captured and formatted for data import on the VTMS.
- A support program that would assist additional operators and maintainers in setting up their fleet data within the department and having the system run for different scenarios. After the VTMS has been validated and rolled out to end users, further testing of different scenarios can help govern policies which are of interest to these fleets.
- The Training will be given based on the roles and authorization.
- The approval on the training will be given by the users. The bidder shall arrange more session till the time the user department gives a satisfactory report on the training.

The number of sessions is subject to change depending on the location of users.

#	Department	Target Audience	No. of sessions	Duration per session (in hours)	Manual / Material Required?
1	SWM	Drivers, In Vehicle Staff	10	6	Yes
		Supervisors & Officers	3	4	Yes
2	SWD	Drivers, In Vehicle Staff	2	6	Yes
		Supervisor & Officers	1	4	Yes

5.4.12. Documentation

For smooth handing over/transfer of the system at the time of expiry of the contract the bidder has to submit all the relevant documents, working status (at the time of handing over), detailed diagrams and drawings (Software, Hardware, Network Components, Field Equipments, Components and subcomponents etc used in the project) and also ensure that the entire system shall be fully functional. To authenticate this process, appropriate authority will be appointed by MCGM.

5.4.13. Scalability

The system should be capable of accommodating future expansion in project if any. (in terms of number of vehicles, routes, Zones, wards, Storage Bins, Storage Bin locations, Transfer stations, etc. and minor process changes).

5.4.14. Data Security

Selected Bidder and its team have to maintain the confidentiality and security of data in true spirit. In no case, breach in security of data will be acceptable. Violation of this clause may lead to severe penalties, maximum up to termination of involved agency as decided by tender issuing authority.

In this regard, selected bidder has comply with the following

1) Non-Disclosure Agreement

The selected Bidder has to sign Non-Disclosure Agreement with MCGM. It will be selected bidder responsibility to get this agreement signed along with contract agreement. Format of Draft NDA is attached in Annexure VI.

2) Audit Trails

VTMS software provided by selected bidder should maintain audit trail of all the work done. Software should have separate login for all the users and administrator.

3) Confinement of data

Any data or related document (both in physical and electronic format) being used for VTMS solution implementation will not be allowed to be taken outside without the permission of Head of the ward/Department.

4) Use of data storage devices

Before the start of the work, selected bidder may proactively take permission from MCGM regarding use of following electronic gadgets

a. Pen Drive
b. Hard Disk
c. CD/DVD
d. Internet dongles
e. Camera/Camcorder
f. Mobile phones having camera or storage facility
g. Any other device capable of storing or capturing data in any format by its staff in following draft format.

- ❖ Name of Staff members to be given access:
- ❖ Type of device to be allowed:
- ❖ Company/Make/Model of device:
- ❖ Any other information required to identify device:
- ❖ Reason for permission:

MCGM may also ask selected bidder to take such permissions specifically for any project.

5.5 Minimum Qualifications & Experience for key Resources

The following are minimum qualifications and experience for key resources required to implement the VTMS solution. The following personnel would be required during the Design, Configuration, Installation and Setup of the VTMS solution.

Implementation Team

Sr. No.	Role	Min. Qualification & Experience
1.	Project Manager	• B.E. / B.Tech Computer Science / IT. + M.B.A. (preferable) • 8+ Years of Experience; 2+ years of Experience as Project Manager • 2+ Years of experience in Vehicle Tracking Solution Implementation
2.	Business Analyst	• B.E. / B.Tech. Computers Science / M.C.A. • 4+ Years of Experience as a Business Analyst / System Analyst
3.	Programmers	• B.E. / B.Tech. Computers Science / M.C.A. • 2+ Years of Experience as a programming for Vehicle tracking solutions / RFID solutions.
4.	Testers	• B.E. / B.Tech. Computers Science / M.C.A. • 2+ Years of Experience as a tester for Vehicle tracking solutions / RFID solutions.
5.	System Administrator	• Graduate with Industry certification in system administration • 5+ Years of Experience System Administrator for software solutions.

6.	Hardware Engineer (GPS)	• Graduate / Diploma with 3+ years of experience for GPS solutions.
7.	Hardware Engineer (RFID)	• Graduate with Industry certification in system administration • 5+ Years of Experience System Administrator for software solutions.

Post Implementation Team

Sr. No.	Role	Min. Qualification & Experience
1.	Project Manager	• B.E. / B.Tech Computer Science / IT. + M.B.A. (preferable) • 8+ Years of Experience; 2+ years of Experience as Project Manager • 2+ Years of experience in Vehicle Tracking Solution Implementation
2.	Programmers	• B.E. / B.Tech. Computers Science / M.C.A. • 2+ Years of Experience as a programming for Vehicle tracking solutions / RFID Solutions
3.	Hardware Engineer (GPS)	• Graduate / Diploma with 3+ years of experience for GPS solutions.
4.	Hardware Engineer (RFID)	• Graduate with Industry certification in system administration • 5+ Years of Experience System Administrator for software solutions.
5.	System Administrator	• Graduate with Industry certification in system administration • 5+ Years of Experience System Administrator for software solutions.
6.	Database Administrator	• Graduate with Industry certification in system administration • 5+ Years of Experience System database administration for software solutions.

The selected bidder shall provide a centralized helpdesk/ customer care centre telephone number/ E-mail/ fax number for attending user request/ complaints. The helpdesk/customer care centre shall operate during working hours as per MCGM for the support period. A detailed escalation plan shall have to be submitted before the commissioning of the services, consisting of not more than 4 tiers from helpdesk to Global/Country Service Manager. MCGM will only provide space and power supply facilities to the selected bidder for setting up the dedicated helpdesk to MCGM. The selected bidder shall arrange the other infrastructures to setup the helpdesk. The Post Implementation team can be reduced over the period in the post implementation period as per MCGM's requirement. Also the proposed team should serve the purpose of supporting the solution without any non-compliance of Service Level Agreements mentioned in the section below.

6 Service Level Agreements

6.1 SLA Objective

The selected bidder shall provide services as per SLA matrix, which defines maximum response as well as rectification times for all kinds of infrastructure/equipment/Software covered under the contract. Contractor is required to provide minimum 99.75% overall uptime for components/services, measured quarterly.

6.2 SLA Matrix

The Contractor shall provide facility management and Annual Maintenance Contract support services as per SLA matrix given below:

6.3 Service Level Penalties

Sr. No	Service Parameters	Threshold Levels	Condition	Penalty
1	Adherence to the agreed implementation timelines	Max one week	If the delay in the deliverable for each milestone exceeds more than a week without a justified reason agreed and approved by MCGM	1 % of the payment to be released on achieving the each milestone as per section 11.4 of this document
2	Availability and Reliability of VTMS solution and devices	99.90%	If the downtime exceeds 60 min in a month for every 30 min	1% of the quarterly contract value will be imposed in event of exceeding the specified metric.
3	Failure of Vehicle units (GPS,RFID readers, sensors)	< 0.5% per day	Over the 0.5% failure per day	0.1% of the quarterly contract value will be imposed in event of exceeding the specified metric
4	Vehicle Location accuracy	+/- 5 meters	For not meeting the requirement every week	0.2% of the quarterly contract value will be imposed in event of exceeding the specified metric
5	Average time for completing any query regarding vehicle status	<45 secs	For not meeting the requirement every week	0.1% of the quarterly contract value will be imposed in event of exceeding the specified metric
6	Time for report generation	<5min	For not meeting the requirement every week	0.1% of the quarterly contract value will be imposed in event of exceeding the specified metric
7	Replacement of a Device (GPS, RFID, Sensors etc.)	<12 days	For every week delay	0.2% of the quarterly contract value will be imposed in event of exceeding the specified metric
Helpdesk (After installation of devices & Go-Live)				
1	**Average Speed of Answer** Speed of answer = Time taken to receive a call. Average Speed of Answer = (Sum of Speed of answer of all calls)/Total No. of calls	<=30 Seconds	Quarterly calculation	0.1% of the quarterly contract value will be imposed in event of exceeding the specified metric
2	**Average Hold Time** (Hold time is no talk time) Average Hold Time = Sum of Hold time for all calls/Total No. of Calls	<=30 Seconds	Quarterly calculation	0.1% of the quarterly contract value will be imposed in event of exceeding the specified metric
3	**Average Call Lost Rate**	<= 1%	Quarterly calculation	0.1% of the quarterly contract value will be imposed in event

Sr. No	Service Parameters	Threshold Levels	Condition	Penalty
	(Total No. of calls lost because they were not attended by an operator / Total incoming calls)*100			of exceeding the specified metric
4	**Call Handling Accuracy** (Total No. of calls/incidents re-opened)	>=95%	Quarterly calculation	0.1% of the quarterly contract value will be imposed in event of exceeding the specified metric
Change Requests (Applicable for all changes in the application after deployment)				
1	Criticality of Change – **Low**	< T+2 weeks, where T is the timeframe for completion of the Change request as agreed upon by MCGM and Implementing agency	Weekly per Occurrence	0.1% of total contract value per week for the first two weeks for each occurrence, 0.5% of total contract value per week for every subsequent week, subject to a maximum of 5 % post which MCGM may invoke Annulment of the contract.
2	Criticality of Change – **Medium**	< T+1 weeks, where T is the timeframe for completion of the Change request as agreed upon by MCGM and Implementing agency	Weekly per Occurrence	0.2% of total contract value per week for the first two weeks for each occurrence, 0.5 % of total contract value per week for every subsequent week, subject to a maximum of 5 % post which MCGM may invoke Annulment of the contract.
3	Criticality of Change – **High**	< T, where T is the timeframe for completion of the Change request as agreed upon by MCGM and Implementing agency	Weekly per Occurrence	0.5% of total contract value per week for the first two weeks for each occurrence, 1.0% of total contract value per week for every subsequent week, subject to a maximum of 5 % post which MCGM may invoke Annulment of the contract.
Issue Response & Resolution (Post Implementation of VTMS)				
1	**Severity 1 Issue**	**Response Time:** <= 2 Hrs from the time the call is logged by end user. **Resolution Time:** <= 8 Hrs from the time the call is logged by end user.	Daily	0.1% of total contract value per day for the first day, 0.20% of total contract value per day every subsequent day, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.
2	**Severity 2 Issue**	**Response Time:** <= 4 Hrs from the time the call is logged by end user.	Daily	0.1% of total contract value per day for the first day, 0.20% of total contract value per day every subsequent day, subject to a maximum of 5.0

Sr. No	Service Parameters	Threshold Levels	Condition	Penalty
		Resolution Time: <= 4 Days from the time the call is logged by end user.		% post which MCGM may invoke Annulment of the contract.
3	**Severity 3 Issue**	**Response Time:** <= 1 Day from the time the call is logged by end user. **Resolution Time:** <= 10 Days from the time the call is logged by end user.	Daily	0.1% of total contract value per day for the first day, 0.20% of total contract value per day every subsequent day, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.

Definitions:

1. **Severity 1:** The VTMS solution down impacting critical business functions OR Multiple critical functions down impacting SWM & SWD users on daily operations OR any module/ function deemed as highly critical by MCGM.

2. **Severity 2:** One VTMS module / functionality down impacting critical business functions OR Multiple critical functions down impacting SWD or SWM users having a major impact on daily operations.

3. **Severity 3:** Loss of business functionality for 10 or more users impacting day to day operations.

4. **Severity 4:** Cosmetic Issues OR Minor functionality down impacting less than 10 users.

5. **Response Time:** Response time is defined as the time the support vendor takes to respond from the time that ticket was raised.

6. **Resolution Time:** Resolution time is defined as the time the vendor takes to resolve the issue or provide acceptable workaround for the issue.

7 Annexure I: Instructions for Pre-Qualification Bid

7.1 Pre-Qualification Cover Letter

Date: dd/mm/yyyy
To
The Director, IT
Municipal Corporation of Greater Mumbai,
Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

Sub : Selection of Implementing Agency for the project "***Implementation of GPS Based Vehicle Tracking & Monitoring Solution***"
Ref : Tender No: <No> Dated <DD/MM/YYYY>

Dear Sir,
Having examined the Bid Document (and the clarification / corrigendum issued thereafter, if any), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the Bid Document for the Appointment of Entry Agencies for the project "***Implementation of GPS Based Vehicle Tracking & Monitoring Solution"***

We attach hereto our responses to pre-qualification requirements and technical & commercial proposals as required by the Bid Document. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to Municipal Corporation of Greater Mumbai, 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 short-listing process.

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

We agree for unconditional acceptance of all the terms and conditions set out in the Bid Document (& subsequent clarification / corrigendum, if any) document and also agree to abide by this tender response for a period of 120 days from the date fixed for bid opening. We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form prescribed the Bid Document.

We agree that you are not bound to accept any tender response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ services specified in the tender response.

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.

_____
Signature of Authorized Signatory (with official seal)
Name :
Designation :
Address :
Telephone & Fax :
E-mail address :

7.2 Check-list for the documents to be submitted

#	Documents to be submitted	Submitted (Y/N)	Documentary Proof (Page No.)
Pre-Qualification Envelope			
1.	Bid Covering Letter		
2.	Scanned copy of Demand Draft for EMD		
3.	Particulars of the Bidders (in the formats given subsequently)		
4.	Copy of Certificate of Incorporation		
5.	Solvency Certificate		
6.	Copy of Audited Balance Sheet for each of the last 3 financial years certified by Chartered Accountant		
7.	Certificate from the Chartered Accountant towards turnover of the company as on 31/03/2013		
8.	Certificate of completion from clients for projects valued minimum of Rs. 5 cr in each of last 3 financial years		
9.	Declaration letter that the firm is not blacklisted by Central Government or any State Government organization / department in India at the time of submission of the Bid, in the format given in the Bid Document		
10.	Certificate from HR mentioning number of technical employees having knowledge of GPS based Vehicle tracking / RFID solutions & Software / System Integration / Networking on payroll and their qualifications		
11.	Certified copies of valid PAN Card		
12.	Statement of Deviation from the Bid Document Requirements in the Format given the Bid Document		
13.	Copy of the IT return filed for the last three financial years by the Agencies		
14.	Copy of EPF registration certificates		
15.	Copy of ESI registration certificates		
16.	Certified copy of bank A/c statements for the last three years issued by the bank		
17.	Attested copy of the registration certificate of branch office		
18.	The Bidder should be registered with appropriate authorities under Employees Provident Fund and Employees State Insurance Acts.		
Technical Proposal Envelope			
19.	Work orders/Certificates from clients for minimum number of projects and minimum value of projects		
20.	Certificate from HR head certifying at least 50 technically qualified personnel in the area of GPS based vehicle tracking / RFID solutions & Software / System Integration on payroll as of bid date.		
21.	Certificate from HR head certifying at that all resources proposed have graduate qualification		
22.	Certificate from Head of bidder regarding turnover from Vehicle Tracking / RFID Solutions & Software / System Integration business in each of the last three financial years		

#	Documents to be submitted	Submitted (Y/N)	Documentary Proof (Page No.)
23.	Certificate from Head of bidder regarding total turnover from Vehicle tracking / RFID Solutions & Software / System Integration business in last three financial years		
Commercial Proposal Envelope			
24.	Commercial Bid Cover Letter		
25.	"Best Price" Offer Letter		
26.	Commercial Bid		

7.3 Format to share Bidder's Particulars

Sr. No	Description	Details (to be filled by the responder to the Bid Document)
1.	Name of the company	
2.	Official address	
3.	Phone No. and Fax No.	
4.	Corporate Headquarters Address	
5.	Phone No. and Fax No.	
6.	Web Site Address	
7.	Details of Company's Registration (Please enclose copy of the company registration document)	
8.	Name of Registration Authority	
9.	Registration Number and Year of Registration	
10.	Service Tax Registration No.	
11.	Permanent Account Number (PAN)	
12.	Company's Revenue for last 3 years (Year wise)	
13.	Company's Profitability for the last 3 years (Year wise)	

Please submit the relevant proofs for all the details mentioned above along with your Bid response.

Contact Details of officials (at least two) for future correspondence regarding the bid process:

Details	Authorised Signatory	Secondary Contact
Name		
Title		
Company Address		
Phone		
Mobile		
Fax		
E-mail		

7.4 Format for Declaration by the bidder for not being Blacklisted / Debarred

(To be submitted on the Letterhead of the responding firm)

Date: dd/mm/yyyy

To
The Director, IT
Municipal Corporation of Greater Mumbai,
Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

Sub : Declaration for not being debarred / black-listed by Central / any State Government department in India as on the date of submission of the bid

Dear Sir,

I/We, the undersigned, herewith declare that my/our company (<-- name of the firm -->) has not been debarred / black-listed by Central / any State Government department in India as on the date of submission of the bid.

Thanking you,
Yours faithfully,

_____
Signature of Authorized Signatory (with official seal)
Date :
Name :
Designation :
Address :
Telephone & Fax :
E-mail address :

7.5 Format for Statement of Deviation from the Bid Document Requirements

Date: dd/mm/yyyy

To
The Director, IT
Municipal Corporation of Greater Mumbai,
Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

Sub : Selection of Implementing Agency for the Project ***"Implementation of GPS Based Vehicle Tracking & Monitoring System"***
Ref : Tender No: <No> Dated <DD/MM/YYYY>

Dear Sir,

I would like to herewith state that in the proposal submitted by M/s. ----------, there are no deviations from the Bid Document Requirements / Terms & Conditions. The entire work shall be performed as per the project requirements.

OR (Strike out whatever is not applicable)

I would like to herewith state that in the proposal submitted by M/s. ----------, following is the exhaustive list of deviations and variations from the Bid Document requirement. Except for these deviations and variations, the entire work shall be performed as per your specifications and requirements mentioned in the Bid Document.

Sr. No.	Reference of Bid Document Volume Number, Clause No. & Page. No	Deviation in the Bid	Brief Reasons

Yours faithfully,

(Signature of Authorized Signatory)
Name :
Designation:

7.6 Performance Bank Guarantee Format

(For a sum of 10% of the value of the contract)

Ref. No. :
Date :
Bank Guarantee No. :

To
Municipal Commissioner
Municipal Corporation of Greater Mumbai,
Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

THIS INDENTURE made this ---------- day of ---------20---- BETWEEN THE ---------- BANK incorporated under the English / Indian Companies Acts and carrying on business in Mumbai (hereinafter referred to as 'the bank' which expression shall be deemed to include its successors and assigns) of the first part ----------
---------- inhabitants carrying on business at ----------
---------- in Mumbai under the style and name of Messers ----------
---------- (hereinafter referred to as 'the contractors') of the second part Shri----------
---------- THE MUNICIPAL COMMISSIONER FOR GREATER MUMBAI (hereinafter referred to as 'the Commissioner' which expression shall be deemed, also to include his successor or successors for the time being in the said office of Municipal Commissioner) of the third part and THE MUNICIPAL CORPORATION OF GREATER MUMBAI (hereinafter referred to as 'the Corporation') of the fourth part WHEREAS the contractors indemnify and keep indemnified the Corporation against any loss or damage that may be caused to or suffered by the Corporation by reason of any breach by the contractors of any of the terms and conditions of the contract that will be entered subsequently (within 15 days) and/or in the performance thereof against Letter of Intent number ---------- dated ---------- for the project "***Implementation of GPS Based Vehicle Tracking & Monitoring System***" of ---------- department having tender No. <<>> tender amount Rs.---------- and the terms of such tender / contract require that the contractors shall deposit with the Commissioner as earnest money and/ or the security a sum of Rs.---------- (Rupees----------) AND WHEREAS if and when any such tender is accepted by the Commissioner, the contract to be entered into in furtherance thereof by the contractors will provide that such deposit shall remain with and will be appropriated by the Commissioner towards the Security Deposit to be taken under the contract and be redeemable by the contractors, if they shall duly and faithfully carry out the terms and provisions of such contract and shall duly satisfy all claims properly chargeable against them thereunder AND WHEREAS the contractors are constituents of the Bank and in order to facilitate the keeping of the accounts of the contractors, the Bank with the consent and concurrence of the contractors has requested the Commissioner to accept the undertaking of the Bank hereinafter contained, in place of the contractors depositing with the Commissioner the said sum as earnest money and/or the security as aforesaid AND WHEREAS accordingly the Commissioner has agreed to accept such undertaking. NOW THIS AGREEMENT WITNESSES that in consideration of the premises, the Bank at the request of the contractors (hereby testified) UNDERTAKES WITH the Commissioner to pay to the Commissioner upon demand in writing, whenever required by him, from time to time, so to do, a sum not exceeding in the whole Rs.---------- --------- (Rupees----------

) under the terms of the said tender and/or the contract. The B.G. is valid upto----------
---

We agree that the decision of the Corporation, whether any breach of any of the terms and conditions of the contract and/or in the performance thereof has been committed by the Bidder and the amount of loss or damage that has been caused or suffered by the Corporation shall be final and binding on us and the amount of the said loss or damage shall be paid by us forthwith on demand and without demur to the Corporation.

"Notwithstanding anything what has been state above, our liability under the above guarantee is restricted to Rs. ---------- only and guarantee shall remain in force upto ---------- unless the demand or claim under this guarantee is made on us in writing on or before----------
----------all your right under the above guarantee shall be forfeited and we shall be released from all liabilities under the guarantee thereafter".

IN WITNESS WHEREOF

WITNESS (1) ----------
Name and ----------
Address ----------

WITNESS (2) ----------
Name and ---------- the duly constituted Attorney Manager
Address ----------
---

the Bank and the said Messrs----------
----------(Name of the bank)

WITNESS (1) ----------
Name and ----------
Address ----------

WITNESS (2) ---------- for Messrs ----------
Name and ---------- (Name of the contractor)
Address ----------

Have here into set their respective hands the day and year first above written.

7.7 Format of Integrity Pact

This Agreement (hereinafter called the Integrity Pact) is entered into on ----day of the ----------month of 20---- between Municipal Corporation of Greater Mumbai acting through Shri ----------(Name and Designation of the officer) (hereinafter referred to as the "M.C.G.M." which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. ----------(Name of the company) represented by Shri ----------, Chief Executive Officer / Authorised signatory (Name and Designation of the officer) (hereinafter called as the "Bidder / Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS THE MCGM invites bid for the ----------(Name of the Stores / Equipment / Service, Bid No. & Date) and the Bidder / Seller is willing to submit bid for the same and

WHEREAS the BIDDER is a private Company / Public Company / Government Undertaking / Partnership Firm / Ownership Firm / Registered Export Agency, constituted in accordance with the relevant law in the matter and the MCGM is Urban Local Body. NOW, THEREFORE

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the MCGM to obtain the desired said stores / equipment/ services/ works at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the MCGM will commit to prevent corruption, in any form, by its officials by following transparent procedures. In order to achieve these goals, the MCGM will appoint an external independent monitor who will monitor the bid process and execution of the contract for compliance with the principles mentioned above.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:-

1. COMMITMENTS OF THE M.C.G.M.

1.1 M.C.G.M. commits itself to take all measures necessary to prevent corruption and follow the system, that is fair, transparent and free from any influence / prejudice prior to, during and subsequent to the currency of the contract to be entered into to obtain stores / equipment / services at a competitive prices in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement.

1.2 The MCGM undertakes that no employee of the MCGM, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract

in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

1.3 M.C.G.M. will during bid process treat all bidders with equity and reason. The M.C.G.M. before and during bid process provide to all bidders the same information and will not provide to any bidder any confidential / additional information through which the bidder could obtain an advantage in relation to the bid process or execution of contract.

1.4 In case any such preceding misconduct on the part of such official(s) is reported by the Bidder to the MCGM with full and verifiable facts and the same is prima facie found to be correct by the Municipal Corporation of Greater Mumbai, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the MCGM and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the MCGM the proceedings under the contract would not be stalled.

2. COMMITMENTS OF THE BIDDERS / CONTRACTORS

2.1 The Bidder commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it.

2.2 The Bidders will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM, connected directly or indirectly with the bidding process or to any MCGM person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

2.3 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM or otherwise in procuring the contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with MCGM for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with MCGM.

2.4 The Bidders / Contractors will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal , in particular regarding prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

2.5 The Bidders/ Contractors will not commit any offence under relevant Anti-corruption Laws of India. Further, the Bidders will not use improperly, for purposes of competition or personal gain or pass on to others, any information or document provided by M.C.G.M. as part of the business relationship regarding plans, technical proposals and business details including information obtained or transmitted electronically.

2.6 The Bidders / Contractors of foreign origin shall disclose the names and addresses of agents / representatives in India, if any, and Indian Bidders shall disclose their foreign principals or associates.

2.7 The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the M.C.G.M.

2.8 The Bidder will not bring any Political, Governmental or Diplomatic influence to gain undue advantage in its dealing with M.C.G.M.

2.9 The Bidder will promptly inform the Independent External Monitor (of M.C.G.M.) if he receives demand for a bribe or illegal payment / benefit and If the comes to know of any unethical or illegal practice in M.C.G.M.

2.10 The Bidders / Contractors will disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract while presenting his bid.

2.11 The Bidders / Contractors shall not lend to or borrow any money from enter into any monetary dealings directly or indirectly, with any employee of the M.C.G.M. or his relatives.

2.12 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

2.13 The Bidders / Contractors will undertake to demand from all sub-contractors a commitment in conformity with this Integrity Pact. 2.14 The bidders / Contractors will not instigate third persons to commit offences outlined above or be an accessory to such offences.

3. PREVIOUS TRANSGRESSION

3.1 The Bidder declares that no previous transgressions occurred in the last 3 years immediately before signing of this Integrity Pact, with any other company in any country or with Public Sector Enterprises in India in respect of any corrupt practices envisaged hereunder that could justify BIDDER‘s exclusion from the bid process.

a. If the Bidder makes incorrect statement on this subject, he can be disqualified from the bid process or the contract if already awarded, can be terminated for such reasons.

4. DISQUALIFICATION FROM TENDER PROCESS AND EXCLUSION FROM FUTURE CONTRACTS

If the Bidders/ Contractors or anyone employee acting on his behalf whether or without the knowledge of the Bidder before award of the contract has committed a transgression through a violation of aforesaid provision or in any other form such as put his reliability or credibility into question, the M.C.G.M. is entitled to exclude the bidder from the bid process or to terminate the contract if already signed and take all or any one of the following actions, wherever required.

4.1 To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the Bidder. Further, the proceedings with the other Bidders would continue.

4.2 The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit / Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the M.C.G.M. and M.C.G.M. shall not be required to assign any reasons therefor.

4.3 To immediately cancel the contract, if already signed, without giving any compensation to the Bidder.

4.4 To recover all sums already paid with interest thereon at 5% higher than the prevailing Base rate of State Bank of India.

4.5 If any outstanding payment is due to the Bidder from M.C.G.M. in connection with any other contract, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

4.6 To encash any advance Bank Guarantee and performance bond/warranty, if furnished by the Bidder, in order to recover the payment already made by M.C.G.M. along with interest.

4.7 To cancel all other contracts with the Bidder. The Bidder shall be liable to pay compensation for any loss or damages to the M.C.G.M. resulting from such cancellation / rescission and the M.C.G.M. shall be entitled to deduct the amount so payable from the money due to the Bidder.

4.8 Forfeiture of Performance Bond in case of a decision by the M.C.G.M. to forfeit the same without assigning any reason for imposing sanction for violation of the Pact.

4.9 The decision of M.C.G.M. to the effect that the breach of the provisions of this Pact has been committed by the Bidder shall be final and conclusive on the Bidder.

4.10 The Bidder accepts and undertakes to respect and uphold the absolute right of M.C.G.M. to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack of any hearing before the decision to resort to such exclusion is taken.

4.11 To debar the Bidders/ Contractors from participating in future bidding process of M.C.G.M. for a minimum period of three years.

4.12 Any other action as decided by Municipal Commissioner based on the recommendation by Independent External Monitors (IEMs).

5. FALL CLAUSE

5.1 The Bidder undertakes that it has not supplied similar products / systems or subsystems in the past six months in the Maharashtra State for quantity variation up to -50% or +10%, at a price lower than that offered in the present bid in respect of any other Ministry / Department of the government of India or PSU or MCGM and if it is found at any stage that similar products / systems or sub systems was supplied by the BIDDER to any other Ministry / Department of the Government of India or a PSU or

MCGM at a lower price, then that very price will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the MCGM, if the contract has already been concluded, else it will be recovered from any outstanding payment due to the bidder from MCGM.

6. EXTERNAL INDEPENDENT MONITOR / MONITORS

6.1 The M.C.G.M. appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the Parties comply with the obligations under this Agreement.

6.2 The Monitor is not subject to instructions by the representatives of parties and perform his functions neutrally and independently and report to the Municipal Commissioner / concerned Additional Municipal Commissioner.

6.3 Both the parties accept that the IEM has the right to access without restriction, to all documentation relating to the project / procurement, including minutes of meetings.

6.4 The Bidder shall grant the IEM upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to sub-contractors.

6.5 The IEM is under contractual obligation to treat, the information and documents of the Bidder / Contractor / sub-contractor, with confidentiality.

6.6 The MCGM will provide to the IEM sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the IEM the option to participate in such meetings.

6.7 As soon as the IEM notices, or believes to notice, a violation of this Agreement, he will so inform the Additional Municipal Commissioner. The IEM can in this regard submit non-binding recommendations. If Additional Municipal Commissioner has not, within a reasonable time, taken visible action to proceed against such offence, the IEM may inform directly to the Municipal Commissioner.

6.8 The IEM will submit a written report to the Municipal Commissioner / Additional Municipal Commissioner within 8 to 10 weeks from the date of service of intimation to him by M.C.G.M./ Bidder and should the occasion arise, submit proposals for correcting problematic situations.

6.9 The word "IEM" would include both singular and plural.

6.10 Both the parties accept, that the recommendation of IEM would be in the nature of advice and would not be legally binding. The decision of Municipal Commissioner in any matter / complain will be the final decision.

7. VALIDITY OF THE PACT

7.1 The validity of this Integrity Pact shall be from the date of its signing and extend upto three years or the complete execution of the contract to the satisfaction of both the M.C.G.M. and BIDDER / Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract. 7.2 If any claim is made/ lodged during the validity of this contract, such claim shall be binding and continue to be valid despite the lapse of this pact unless it is discharged / determined by the Municipal Commissioner / Additional Municipal Commissioner of the M.C.G.M.

8. FACILITATION OF INVESTIGATION

In case of any allegation of violation of any provisions of this Pact or payment of commission, the MCGM or its agencies OR Independent External Monitor shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. MISCELLANEOUS

9.1 This Agreement / Pact is subject to the Indian Laws, place of performance and jurisdiction is the registered office of the M.C.G.M. i.e. Mumbai and the actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

9.2 If the Contractor is a partnership or a consortium, this Agreement must be signed by all partners or consortium members.

9.3 Should one or several provisions of this Agreement turn out to be invalid, the remainder of this Pact remains valid. In this case, the Parties will strive to come to an Agreement to their original intentions.

10. The Parties hereby sign this Integrity Pact at ----------on----------

	MCGM	**BIDDER/SELLER**
Signature	----------	----------
Name of officer	----------	----------
Designation	----------	----------
Name of Company	----------	----------
Address	----------	----------
	----------	----------
Dated	----------	----------
	WITNESS-1(MCGM)	**Witness-1(BIDDER/SELLER)**
Signature	----------	----------
Name of officer	----------	----------
Designation	----------	----------
Name of Company	----------	----------
Address	----------	----------
	----------	----------
Dated	----------	----------

8 Annexure II: Instructions and Technical Bid Document Formats

8.1 General Instructions on Preparation of the Technical Proposal

Bidders have to submit a very structured and organized technical proposal, which will be analyzed by the Technical Evaluation Committee for different compliances with regards to the requirements of the project.

Bidder is expected to divide its proposal in following Sections / Documents:

A) Bidder's Competence to execute the project

This document should bring about the capability of the firm to execute this project. Some of the required documents are as follows:

- Financial Capability of the Bidder in required formats and supporting documents
- Experience of Bidder in Vehicle Tracking Implementation Projects in required formats and supporting documents
- Experience of Bidder in MCGM in required formats and supporting documents
- Quality of GPS, RFID and VTMS Implementation Manpower in the firm.

The selected bidder will have to submit the following table for giving the Relevant Experience:

Sr No.	Client Name	No. Of Vehicles	Contract Value (In Lacs)	Mapping Platform	RFID used? (Yes / No)	Brief Description

B) Proposed Team for the Project

As specified in the Technical Bid Evaluation Framework, MCGM would like to give importance on the right people proposed for the project. Bidder may propose different people for different skill-sets required & different responsibilities (during Project Implementation & Post-Implementation). Following documentation is expected in this section:

- Overall Project Team (for both Project Implementation & Support phases)
- Escalation Chart for the entire Project Duration
- Summary Table giving Qualification, Experiences, Certifications, Relevance
- Detail CVs in the format attached

C) Technical Solution Proposed for the Project

Broad areas to be covered in the Technical Solution documentation are given below:

1. **Bill of Material**: This document should give details of all the proposed IT & Non-IT components, without specifying the costs. Please note that the bid shall get disqualified if bidder gives price details in the technical document. The format for Bill Of Material is below:

Sr. No.	Item Description	Specification	Make & Model
1			
2			
3			

4			
5			
6			

All the above documents should be included in technical bid packet.

8.2 Format to share Project Details

Name of the Project	
General Information	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the project	
Scope of work of the Bidder	
Deliverables of the Bidder	
Technologies used	
Outcomes of the project	
Other Details	
Total cost of the project	
Total cost of the services provided by the bidder	
Duration of the project (no. of months, start date, completion date, current status)	
Other Relevant Information	
Mandatory Supporting Documents: • Work order / Purchase order / Contract for the project • Client Certificate giving present status of the project and view of the quality of services by the bidder	

Note: The Bidder is required to use above format for all the projects referenced by the bidder for the pre-qualification criteria and technical bid evaluation.

8.3 Details of Manpower Resources Proposed

#	Name of the Resource	Proposed Role	Highest Qualification	Total Experience (in years)	Total Relevant Experience for the proposed position (in years)

CV of the Key Manpower proposed to be submitted in the following format:

1	Name of the Staff	
2	Current Designation in the Organisation	
3	Proposed Role in the Project	
4	Proposed Responsibilities in the Project	
5	Date of Birth	
6	Education	▪ Degree / Diploma, College, University, Year of Passing ▪ Degree / Diploma, College, University, Year of Passing
7	Summary of Key Training and Certifications	▪ ▪
8	Language Proficiency	Language / Reading / Writing / Speaking (/ / /) (/ / /) (/ / /)
9	Employment Record (For the total relevant experience)	From / To: Employer: Position Held: From / To: Employer: Position Held: From / To: Employer: Position Held:

10	Total No. of Years of Work Experience	
11	Total No. of Years of Experience for the Role proposed	
12	Highlights of relevant assignments handled and significant accomplishments (Use following format for each project)	

Name of assignment or project:	
Year:	
Location:	
Client:	
Main project features:	
Positions held:	
Activities performed:	

9 Annexure III: Commercial Proposal Formats

9.1 Commercial Proposal Cover Letter

Date: dd/mm/yyyy

To
The Director, IT
Municipal Corporation of Greater Mumbai,
Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

Sub : Selection of Implementing Agency for the Project "***Implementation of GPS Based Vehicle Tracking & Monitoring Solution***"
Ref : Tender No: <No> Dated <DD/MM/YYYY>

Dear Sir,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of Project "***Implementation of GPS Based Vehicle Tracking & Monitoring Solution***" do hereby propose to provide services as specified in the Bid Document referred above**.**

1. PRICE AND VALIDITY
   - All the prices mentioned in our Tender are in accordance with the terms as specified in the Tender documents. All the prices and other terms and conditions of this Tender are valid for a period of 120 calendar days from the date of opening of the Tenders.
   - We hereby confirm that our Tender prices include all taxes. Taxes are quoted separately under relevant sections, as specified in the Bid Document formats.
   - We have studied the clause relating to Indian Income Tax and hereby declare that if any income tax, surcharge on Income Tax, Professional and any other corporate Tax in altercated under the law, we shall pay the same.

2. UNIT RATES
   We have indicated in the relevant schedules enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to / decrease from the scope of work under the contract.

3. DEVIATIONS
   We declare that all the services shall be performed strictly in accordance with the Bid Documents and there are no deviations except for those mentioned in Pre-Qualification Envelope, irrespective of whatever has been stated to the contrary anywhere else in our bid.

   Further we agree that additional conditions, if any, found in our bid documents, other than those stated in the deviation schedule in Pre-Qualification Envelope, shall not be given effect to.

4. QUALIFYING DATA
   We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our Tender, we agree to furnish the same in time to your satisfaction.

5. BID PRICE
   We declare that our Bid Price is for the entire scope of the work as specified in the Bid Document. The bid price at which the contract is awarded shall hold good for entire tenure of the contract. These prices are indicated in the subsequent sub-sections of this Section.

6. CONTRACT PERFORMANCE GUARANTEE BOND
   We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance Bank Guarantee in the form prescribed in the Bid Document.

We hereby declare that our Tender is made in good faith, without collusion or fraud and the information contained in the Tender is true and correct to the best of our knowledge and belief.

We understand that our Tender is binding on us and that you are not bound to accept a Tender you receive. We confirm that no Technical deviations are attached here with this commercial offer.

Thanking you,

Yours faithfully,

(Signature of the Authorised Signatory)
Name
Designation
Seal.

Date:
Place:
Business Address:

9.2 "Best Price" Offer Letter Format

On Rs. 200/- Stamp Paper duly notarized by notary with red seal and registration number

---

Date: dd/mm/yyyy
To
The Director, IT
Municipal Corporation of Greater Mumbai,
Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

Sub : Best Price Offer for the Project "***Implementation of GPS Based Vehicle Tracking & Monitoring Solution***"

Ref : Tender No: <No> Dated <DD/MM/YYYY>

Dear Sir,

"I/ We ..... (full name in capital letters, starting with surname), the proprietor/ Managing Partner/ Managing Director/ Holders of the Business/ Manufacturer/ Authorised Dealer, for the establishment/ firm/ registered company, name herein below, do hereby, state and declare that I/We .....whose names are given herein below in details with the addresses have not filled in this tender under any other name or under the name of any other establishment /firm or

otherwise, nor are we in any way related or concerned with any establishment/ firm or any other person, who have filled in the tender for the aforesaid work."

"I/ We do hereby further undertake that, we have offered the best prices for the subject supply/ work as per the present market rates**. Further, We do hereby undertake and commit that we have not offered /supplied the subject product/ similar product/ systems or sub systems in the past one year in the Maharashtra state for quantity variation up to -50% or + 10% at a price lower than the offered in the present bid to any other outside agencies including Govt./Semi Govt. Agencies.** Further, we have filled in the accompanying tender with full knowledge of the above liabilities and therefore we will not raise any objection or dispute in any manner relating to any action, including forfeiture of deposit and blacklisting, for giving any information which is found to be incorrect and against the instruction and direction given in this behalf in this tender.

I/ We further agree and undertake that in the event, if it is revealed subsequently after the allotment of work/ contract to me/ us, that any information given by me/ us in this tender is false or incorrect, I/ We shall compensate the Municipal Corporation of Greater Mumbai for any such losses or inconvenience caused to the corporation in any manner and will not raise any claim for such compensation on any ground whatsoever, I/ We agree and undertake that I/ We shall not claim in such case any amount, by way of damages or compensation for cancellation of the contract given to me/ us or any work assigned to me/ us or is withdrawn by the Corporation.

However, if the price difference results due to different tax structures or currency fluctuations, MCGM shall consider this aspect before invoking the penalty, blacklisting etc. and I/We will be given a reasonable opportunity of being heard by representing our case as to why such price variation/ differential has arisen. In case, if the explanation submitted by me/us is unsatisfactory then action as stated above including forfeiture of deposit and blacklisting may be taken against me/us.

(Signature of the Authorised Signatory)
with Full Name & Rubber Stamp)

9.3 Commercial Proposal Format & Instructions

The Bidder has to quote the rate in the BoQ available online via e-Tendering, instructions on which have been illustrated clearly on the web link – User Manuals

Details to be filled up for price bid are as follows:

Fixed Components

Sr. No.	Item	Quantity	Unit Rate	Total Commercials (over 5 years)
1.	GPS devices Supply & Installation			
2.	RFID Readers Supply & Installation			
3.	RFID Passive Tags Supply & Installation			
4.	Fuel Expert Sensors Supply & Installation			
5.	Weight Sensors Supply & Installation			
6.	Temperature Sensors Supply & Installation			
7.	Data Terminal Supply & Installation			
8.	Application Server Supply & Installation for data centre hosting			

Sr. No.	Item	Quantity	Unit Rate	Total Commercials (over 5 years)
9.	Database Server Supply & Installation for data centre hosting			
10.	RDBMS Supply & Installation for data centre hosting			
11.	Database Storage Supply & Installation for data centre hosting			
12.	Software Licences Supply & Installation for data centre hosting			
13.	Geocoding / Survey of sites (Offices / dumping grounds / stations / bins)			
14.	LCD panels for Control Room			
15.	UPS for Control Room			
16.	Laser Printers for Control Room			
17.	Development, Customization, Integration of VTMS solution			
18.	Training of Users including documentation			
19.	Maintenance cost for devices (per year for 5 years from date of Go-Live)			
20.	Man Power Support for 5 years(as per the requirement mentioned)			
Grand Total (for 5 years)				

Variable Component

Sr. No.	Item	Quantity	Unit Rate	Total Commercials (over 5 years)
21.	Supply and Installation of RFID Tags (Extra)			

Note:

- The bidders may visit the site and obtain additional information at their own cost and responsibility.
- All the prices are to be entered in Indian Rupees ONLY.
- The Bidder needs to account for all Out of Pocket expenses due to Boarding, Lodging and other related items.
- The Variable component for RFID tags will not considered for the commercial evaluations. However in case MCGM wants to procure more RFID tags, then the variable component unit price will be considered.

- Prices indicated in the schedules shall be inclusive of all taxes, Levies, duties etc. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for. During the payment stage, MCGM reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
- For the purpose of evaluation of Commercial Bids, MCGM shall make appropriate assumptions to arrive at a common bid price for all the Bidders. This however shall have no co-relation with the Contract value or actual payment to be made to the Bidder.
- The Contract Price shall be a firm not subject to any alteration.
- The service provider shall be deemed to have satisfied itself as to the correctness and sufficiency of the contract price, which shall, except as otherwise provided for in the contract, cover all its obligations under the contract.

10 Annexure IV: Technical Specifications

Below shown are the indicative technical specifications of the major components of the in the proposed Vehicle Tracking and Monitoring Solutions:

GPS base tracking device Specifications:

Sr. No.	Part	Parameter	Details
1	Connectivity	GSM/GPRS or Higher Modem – Transmitting power Class 4 (2W) at GSM 850 and EGSM 900 Class 1 (1W) at DCS 1800 and PCS 1900 with IMEI	Quad-band GSM/GPRS Modem or higher, Downlink max. Speed 85.6 kbps & Uplink max. speed 42.8 kbps
		Number	IMEI
		Frequency	GSM 850, EGSM 900, DCS 1800, PCS 1900
		Transmitting power	Class 4 (2W) at GSM 850 and EGSM 900 Class 1 (1W) at DCS 1800 and PCS 1900
		Connectivity	GPRS or higher multi-slot class 10
		Coding scheme	CS-1, CS-2, CS-3 and CS-4
		SIM interface	External SIM card: 1.8V, 3V with
2	GPS Navigation	Receiver	42 Channels
		Frequency	1575.42MHz
		Acquisition Time	Hot Start – 1 sec, Open Sky, Cold Start - 30 Sec, Open Sky
		Horizontal Position Accuracy	2.5 meter
		Tracking Sensitivity	160 dBm
		Output	NMEA Protocol
		Antenna	Active GPS Antenna
3	Power	Operating Voltage	8V – 32V
		Operating current	@24V Ideal Mode: 80m GPRS or higher trans/rec:- 160mA
		Battery Reverse	Integrated Protection

Sr. No.	Part	Parameter	Details
4	Environment	Operating Temperature	-25 to 80 degree Celsius (without LCD) -20 to 70 degree Celsius (with LCD)
5	Memory		16 MB
6	Weight		100-200 gm

UHF Passive RFID Tag Specifications:

Parameter	Specification
Type	ABS, High Quality Engineering Plastic
Supported Transponders	ISO18000-6C EPC Class 1 GEN2
Frequency Range	ISM865~928MHz
Operation Mode	Fixed Frequency or FHSS Software Programmable
Memory capacity	The tag should support ISO18000-6C protocol standard 2K Bits storage capacity, 1728 Bits (216bytes) writable user area; MR6730B metal supports EPC C1 GEN2 (ISO18000-6C), with 96Bits writable EPC Code area, 512Bits writable user area, and 32Bits password area, EPC 128 bit user 512 bit TID 96 bits.
Reading Rate	Software Programmable, Average Reading per 64Bits <10ms
Tags material	Metal material
Reading Range	Should be able to be calibrated. (to be kept as 2-4m max) based on the site visit.
Operation Temp	-35°C to 85°C
IP Classification	IP 68
Weather	Heat, dust proof, UV resistant & sea water resistant.
Chemical Resistance	No physical or performance changes in 168 hour Motor oil exposure 168 hour Salt water exposure (salinity 10%) 5 hrs Sulfric acid (10 %Ph 2) 1 h Naoh (10 % Ph 14) exposure

RFID Reader Specifications:

Parameter	Specification
Protocol	ISO18000-6C EPC GEN2 Configurable for mixed or single tag-type operation. Air interface software on IV7 is downloadable to add Gen 2 and Class 1 air interfaces and to “future-proof” the product as standards evolve and new features become available.
Frequency Range	Standard ISM 902 928MHz or 915 MHz (US FCC), 865 MHz (ETSI 302-208), and 869 MHz (ETSI 300-220)
Operation Mode	FHSS

Parameter	Specification
RF Power	0~30dBm, software adjustable
Reading Speed	Software Programmable Average Reading per 64Bits <6ms
Reading Mode	Timing or Touch, Software Programmable (reading should be such that the reader does reads two tags at a time)
Communication Mode with central server	TCP/IP and GPRS or higher
Data Input Port	Trigger input one time
Reading Range	Max 12 m(able to calibrate)
Communication Interface	RS232
Accessories	Vehicle-mount DC power cable kit Antennas, and antenna cables
Environmental Rating	IP65
Humidity	10% - 90%
Shock and Vibration Protection	Withstands standard material handling vehicle environments. Meets or exceeds MIL STD 810F
Operating Temperature:	-25°C to 55°C (-13°F to 131°F)
Storage Temperature:	-30°C to 75°C (-22°F to 167°F)
Humidity	10% to 90%
Power Supply	Vehicle DC power 12 to 60V, 4.5 A maximum

Indicative Hardware Specifications:

Sr. No.	Item	Minimum Specifications
1.	Application Server & Database Server	• 64 bit , x86/ RISC / EPIC with minimum 8 cores with 2.4 GHz or above Processor and the latest series/generation for the server model being quoted • Support for either of 64bit LINUX with cluster support • Cache to be min 4MB per processor/ on chip • Minimum 64 GB RAM; with provision of future expansion • 2 x 600 GB(or higher) SAS/ hot plug drives (10k rpm or more) • Disk bays: Support for min 2 more hot plug SAS/ SATA in disk drive carriers that slides out from front • 2 Ethernet Ports of 10/100/2000 Mbps • Fiber Channel adapters/ports 2 x 8Gbps • Ports Two USB ports (Ver 2.0) • Hot plug Redundant Power Supply; • RAID Controller supporting RAID 0, 1, 5 with 256 MB Cache • Security: Power-on password / admin password / unattended boot / selectable boot / boot without keyboard • Cooling fans: minimum Four fans / multispeed / hot-swap and redundant fan failure signals to management module / fan in each power supply / CPU / memory. • Form Factor: Rack Mountable / Blade

11 Annexure V: Draft Contract Agreement

On Non Judicial Stamp Paper

This Contract Agreement, hereinafter referred to as **"*CA*"** is made this ____ day of _____ 2013 at [office address]

BETWEEN

The Director, IT, Municipal Corporation of Greater Mumbai, Maharashtra State, (which term or expression, unless excluded by or repugnant to the subject or context, shall mean and include its successors-in office and assigns) of the First Part (which term or expression, unless excluded by or repugnant to the subject or context, shall mean and include its successors-in office and assigns) of the First Part

AND

M/s _____, a company registered under The Companies Act, 1956 having its registered office at _____ and place of business at _____, hereinafter referred to as **"*Implementing Agency* "** (which term or expression, unless excluded by or repugnant to the subject or context, shall mean and include its successors and permitted assigns) of the Second Part

Each individually a "Party" hereto and collectively the "Parties"

And Whereas MCGM intends to provide convenient and speedy services using Information & Communication Technologies (ICT) to its officials and published the tender to select implementing agency who can implement a GPS based vehicle tracking and monitoring solution for SWM and SWD departments of MCGM .
And whereas M/s. ---------- has submitted its proposal to get selected in "***Implementation of GPS Based Vehicle Tracking & Monitoring System"***

NOW, THEREFORE, in consideration of the premises covenants and promises contained herein and other good and valuable considerations, the receipt and adequacy of which is hereby acknowledged, the parties intending to be bound legally, IT IS HEREBY AGREED between the Parties as follows:

11.1 Definitions, Interpretations and Other Terms

a) ***Bid*** means the tender process conducted by MCGM and the technical and commercial proposals submitted by the successful bidder, along with the subsequent clarifications and undertakings, if any;

b) ***Confidential Information*** means all information including MCGM Data (whether in written, oral, electronic or other format) which relates to the technical, financial, business affairs, customers, suppliers, products, developments, operations, processes, data, trade secrets, design rights, know-how and personnel of each Party and its affiliates which is disclosed to or otherwise learned by the other Party in the course of or in connection with this CA (including without limitation such information received during negotiations, location visits and meetings in connection with this CA);

c) ***Customers*** mean all citizens and business organization and users who use the MCGM services.

d) ***Deliverables*** means all the activities related to the VTMS, providing Vehicle tracking and monitoring solution using GPS devices and any other infrastructure as defined in the Bid Document & subsequent Corrigendum (if any), based on which the technical proposal & commercial proposal was submitted by the Bidder and as required as per this CA;

e) ***Effective Date*** means the date on which this CA is executed;

f) ***CA*** means this Contract Agreement, together with the recitals and all schedules and the contents, requirements, specifications and standards of the Bid Document (as may be amended, supplemented or modified in accordance with the provisions hereof) and the Bid**. In the event of a conflict between this CA and the Schedules, the terms of the CA shall prevail; with overriding effect**;

g) ***Performance Security*** means the irrevocable and unconditional Bank Guarantee provided by the Service Provider from by any of the approved banks as specified in Annexure V of the Bid Document in favor of "Municipal Corporation of Greater Mumbai" for an amount equivalent to 10% of the total contract value i.e. Rs.....(Rupees.....only);

h) ***Proprietary Information*** means processes, methodologies and technical and business information, including drawings, designs, formulae, flow charts, data and computer programs already owned/licensed by either Party or granted by third parties to a Party hereto prior/ subsequent to the execution of this MSA;

i) ***Required Consents*** means the written consents, clearances and licenses, rights and other authorizations as may be required to be obtained by the Service Provider, for all tasks/activities/software/hardware and communication technology for this project; from all the concerned departments/agencies, etc. as the case may be.

j) ***Bid Document*** means the Request for Proposal released vide Bid Document number specified under section 4.1, and include all clarifications/addendums, explanations and amendments issued by the department in respect thereof;

k) ***Service Level(s)*** means the performance standards, which will apply, to the services delivered by the Service Provider.

l) ***Service Level Requirement(s)*** means the timelines and the quality levels to be adhered to by the Service Provider for delivering various services under the contract;

m) ***Services*** means the content and services delivered and to be delivered to the customers or the offices of MCGM by the Service Provider, and includes but not limited to the services specified in the Bid Document or as may be specified and incorporated in the subsequent Agreement/s under Contract Agreement.

11.2 Interpretations

a) References to any statute or statutory provision include a reference to that statute or statutory provision as from time to time amended, extended, re-enacted or consolidated and to all statutory instruments made pursuant to it;

b) Words denoting the singular shall include the plural and vice-versa and words denoting persons shall include firms and corporations and vice versa;

c) Unless otherwise expressly stated, the words "herein", "hereof", "hereunder" and similar words refer to this CA as a whole and not to any particular Article, Schedule. The term Articles, refers to Articles of this CA. The words "include" and "including" shall not be construed as terms of limitation. The words "day" and "month" mean "calendar day" and "calendar month" unless otherwise stated. The words "writing" and "written" mean "in documented form", whether electronic or hard copy, unless otherwise stated;

d) The headings and use of bold type in this CA are for convenience only and shall not affect the interpretation of any provision of this CA;

e) The Schedules to this CA form an integral part of this CA and will be in full force and effect as though they were expressly set out in the body of this CA;

f) Reference at any time to any agreement, deed, instrument, license or document of any description shall be construed as reference to such agreement, deed, instrument, license or other document as the same may be amended, varied, supplemented, modified or suspended at the time of such reference;

g) Any word or expression used in this CA shall, unless defined or construed in this CA, bear its ordinary English language meaning;

h) The damages payable by a Party to the other Party as set forth in this CA, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and liquidated damages likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalties;

i) This CA shall operate as a legally binding agreement specifying the master terms, which apply to the Parties under this agreement and to the provision of the services by the Service Provider;

j) The department may nominate a technically competent agency/individual(s) for conducting acceptance testing and certification of quality of Solution;

k) The agency/individual nominated by the department can engage professional organizations for conducting specific tests on the data entered, software, hardware, security and all other aspects;

l) The agency/individual will establish appropriate processes for notifying the Service Provider of any deviations from the norms, standards or guidelines at the earliest instance after taking cognizance of the same to enable the Service Provider to take corrective action;

m) The documents forming this Agreement are to be taken as mutually explanatory of one another. The following order shall govern the priority of documents constituting this Agreement, in the event of a conflict between various documents, the documents shall have priority in the following order:

   i) This Agreement;

ii) Scope of Services for the Service Provider (hereby annexed as **Annexure I**)
iii) Detail Commercial proposal of the Service Provider accepted by MCGM (hereby annexed as **Annexure II**)
iv) Clarification & Corrigendum Documents published by MCGM subsequent to the Bid Document for this work (hereby annexed as **Annexure III**)
v) Bid Document of MCGM for this work (hereby annexed as **Annexure IV**)
vi) LoI issued by MCGM to the successful bidder (hereby annexed as **Annexure V**); and
vii) Successful bidder's "Technical Proposal" and "Commercial Proposal" submitted in response to the Bid Document (hereby annexed as **Annexure VI**).

11.3 Term of the Contract Agreement

- The term of this CA shall be a period of 5 years from the date of execution of this Agreement.
- In the event of implementation period getting extended beyond the stipulated time, for reasons not attributable to the Service Provider, MCGM reserves the right to extend the term of the Agreement by corresponding period to allow validity of contract from the date of successful go live.

11.4 Work Completion Timelines & Payment Terms

The timelines for the completion of the project is as shown below. The payment terms for the Application development cost is also mentioned in the timelines below

Sr. No.	Milestone	Deliverables	Timelines	Payment Terms *
1.	Signing of Contract	Signed Contract & PBG of 10 % of total contract value	Contract Sign-off Date (T)*	NIL
2.	Project Kick-Off	Project Inception Report covering estimate of the number of Vehicles to be installed with the GPS and Sensor devices. It should also include the study of existing working of department vehicles and initial requirements.	T + 2 Weeks	10 % of the Amount mentioned in **point no. 17** in table mentioned in **section 9.3** of this document
3.	SRS Creation and Survey for Geo Location of all bins, community locations and Dept. Stations	Location map layer for all the geo located feature & a detail SRS document approved by concerned departments.	T + 8 Weeks	20 % of the Amount mentioned in **point no. 17** in table mentioned in **section 9.3** of this document
4.	Complete Hardware and devices installations.	Complete installation and checking report approved by the department	T + 10 Weeks	NIL
5.	Complete System Configuration,	Conference room pilot demo of the entire application. Sign off on the UAT of the VTMS	T + 24 Weeks	40 % of the Amount in

Sr. No.	Milestone	Deliverables	Timelines	Payment Terms *
	Development & Integrations with UAT	solution by department users.		**point no. 17** in table mentioned in **section 9.3** of this document
6.	End User Training	Session wise hand on training for the department users. Training Report to be delivered	T + 26 Weeks	100 % of the Amount in **point no. 18** in table mentioned in **section 9.3** of this document
7.	System Go – Live	Final delivery of VTMS solution with all login details, user manuals, and working VTMS application.	T + 28 Weeks	30 % of the Amount in **point no. 17** in table mentioned in **section 9.3** of this document
8.	Devices cost (GPS devices, Sensors, Servers)	Every hardware device shall be deemed commissioned only when it is connected to the VTMS web solution and being tracked or sending proper data.		100 % payment in quarterly invoices raised as per the number of devices deemed & approved as commissioned.
9.	Maintenance & Support of the VTMS Solution	Quarterly payments for 5 years (To be calculated from MCGM acceptance Support & Maintenance of proposed VTMS Solution)		Quarterly based payment on the invoices raised

Notes:

- The cost mentioned in the commercial proposal format for the hardware devices should include the maintenance cost over 5 years.
- The Service Provider will submit the Bills/Invoices as per the terms & conditions of the Bid Document and contract agreement.
- If the service provider is liable for any penalty/liquidated damages as per the SLA (refer to the section no. **Error! Reference source not found.** of this document), the same shall be adjusted from the ayments due to the Service Provider.
- MCGM will release the payment within 30 days of submission of valid invoice subject to the condition that invoice and all supporting documents produced are in order and work is performed to the satisfaction of MCGM. MCGM shall be entitled to delay or withhold the payment of any invoice or part of it delivered by Service Provider, when MCGM disputes such invoice or part of it, provided that such dispute is bonafide.

- The approval on the deliverables will be given by the concerned department focused (SWM & SWD) to use VTMS solution. Post the signoff by the departments, MCGM – IT departments will process the payments based on the approvals and evaluation of the SLAs.
- The devices shall be declared as commissioned only when they are properly installed in the vehicles, tracked by the VTMS web based solution and verified / approved by the concerned department.
- In case of devices commissioned before the go live date will be considered commissioned and active from the date of go live (7th Month) and the post implementation for such devices will start from the date of commissioning and go live (7th month). In case of devices getting commissioned and declared active after the go live date (7th month) will have the post implementation data live as the data of commissioning and declared as active on the VTMS solution by the concerned department.
- It is mandatory for the contractors to open a Bank Account in any of the banks approved by MCGM (specified in Annexure V of the document) for easy and quick payments. All payments under the contract will be made only on this Bank Account through Electronic Clearing System/ RTGS/ NEFT/ CBS.

11.5 Professional Project Management

- Implementing agency shall execute the project with complete professionalism and full commitment to the scope of work and the prescribed service levels. Service Provider shall attend regular Project Review Meetings called by MCGM and shall adhere to the directions given during the meeting. Following responsibilities are to be executed by the Service Provider in regular manner to ensure the proper management of the project:
  - Finalization of the Project plan in consultation with MCGM and its consultant. Project Plan should consist of work plan, communication matrix, timelines, Quality Plan, etc.
  - Plan and deploy the resources in conjunction with the Project Plan and to execute roles and responsibilities against each activity of the project plan.
  - Appointment of manager for every task who will act as SPOC for MCGM.
  - Preparation & regular update of the Risk Register and the Mitigation Plan. Timely communication of the same to all the identified project stakeholders.
  - Submission of Weekly Project Progress Reports
  - Monthly Compliance report, which will cover compliances to Project Timelines, Project Team, SLAs, etc.
  - Provision of dashboard to check status of progress of project work.
- The Implementing agency should ensure that the behaviour of its staff and other manpower is decent. The agency will be held responsible for indecent behaviour of manpower, & such employees should be immediately replaced when such matter is reported. In case, non-availability of personnel, the agency will be penalized as per the SLA.
- Employees of the Implementing agency shall always wear identity card.

11.6 Use & Acquisition of Assets during the term

The Implementing Agency shall -

a) Take all reasonable & proper care of the entire hardware & software, network, data or any other information technology infrastructure components used for the project & other facilities leased/owned by the Service Provider exclusively in terms of the delivery of the services as per this CA (hereinafter the "Assets") in proportion to their use & control of such Assets which will include all upgrades/enhancements & improvements to meet the needs of the project arising from time to time.

b) Term "Assets" also refers to all the hardware / software / furniture / data / documentations / manuals / catalogues / brochures / or any other material procured, created or utilized by the Implementing Agency or MCGM.

c) Keep all the tangible Assets in good & serviceable condition (reasonable wear & tear excepted) &/or the intangible Assets suitably upgraded subject to the relevant standards as stated in of the Bid Document to meet the SLAs mentioned in the contract & during the entire term of the Agreement.

d) Ensure that any instructions or manuals supplied by the manufacturer of the Assets for use of Assets & which are provided to the Implementing Agency will be followed by the Service Provider & any person who will be responsible for the use of the Asset.

e) Take such steps as may be recommended by the manufacturer of the Assets & notified to the Implementing Agency or as may be necessary to use the Assets in a safe manner.

f) To the extent that the Assets are under the control of the Implementing Agency, keep the Assets suitably housed & in conformity with any statutory requirements from time to time applicable to them.

g) Not, knowingly or negligently use or permit any of the Assets to be used in contravention of any statutory provisions or regulation or in any way contrary to law.

h) Use the Assets exclusively for the purpose of providing the Services as defined in the contract.

i) Ensure smooth end-to-end implementation of VTMS to provide efficient services to MCGM of this Project in an efficient and speedy manner.

j) Implementing Agency shall not use MCGM data to provide services for the benefit of any third party, as a service bureau or in any other manner

11.7 Security and safety

a) The Implementing Agency will comply with the directions issued from time to time by MCGM and the standards related to the security and safety in so far as it applies to the provision of the Services.

b) Implementing Agency shall also comply with MCGM / Government of Maharashtra's / Government of India's Information Technology security and standard policies in force from time to time as applicable.

c) Implementing Agency shall use reasonable endeavors to report forthwith in writing to all the partners / contractors about the civil and criminal liabilities accruing due to by unauthorized access (including unauthorized persons who are employees of any Party) or interference with MCGM's data, facilities or Confidential Information.

d) The Implementing Agency shall upon reasonable request by MCGM or his/her nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.

e) Implementing Agency shall promptly report in writing to MCGM any act or omission which they are aware that could have an adverse effect on the proper conduct of safety and information technology security at MCGM.

11.8 Indemnity

The Implementing Agency agrees to indemnify and hold harmless MCGM, its officers, employees and agents(each a "Indemnified Party") promptly upon demand at any time and from time to time, from and against any and all losses , claims, damages, liabilities, costs (including reasonable attorneys fees and disbursements) and expenses (collectively, "Losses") to which the Indemnified Party may become subject, in so far as such losses directly arise out of, in any way relate to, or result from

(i) Any mis-statement or any breach of any representation or warranty made by the Implementing Agency or

(ii) The failure by the Implementing Agency to fulfill any covenant or condition contained in this Agreement, including without limitation the breach of any terms and conditions of this Agreement by any employee or agent of the Implementing Agency. Against all losses or damages arising from claims by third Parties that any Deliverable (or the access, use or other rights thereto), created by Implementing Agency pursuant to this Agreement, or any equipment, software, information, methods of operation or other intellectual property created by Implementing Agency or sub contractors pursuant to this Agreement, or the SLAs (I) infringes a copyright, trade mark, trade design enforceable in India, (II) infringes a patent issued in India, or (III) constitutes misappropriation or unlawful disclosure or use of another Party's trade secretes under the laws of India (collectively, "Infringement Claims"); provided, however, that this will not apply to any Deliverable (or the access, use or other rights thereto) created by (A) "Work carried out by Implementing Agency ; (B) Third Parties (i.e., other than Implementing Agency or sub-contractors) at the direction of MCGM, or

(iii) any compensation / claim or proceeding by any third party against MCGM arising out of any act, deed or omission by the Implementing Agency or

(iv) claim filed by a workman or employee engaged by the Implementing Agency for carrying out work related to this Agreement. For the avoidance of doubt, indemnification of Losses pursuant to this section shall be made in an amount or amounts sufficient to restore each of the Indemnified Party to the financial position it would have been in had the losses not occurred.

Any payment made under this Agreement to an indemnity or claim for breach of any provision of this Agreement shall include applicable taxes.

11.9 Third Party Claims

a. Subject to Sub-clause (b) below, the Implementing Agency (the "Indemnified Party") from and against all losses, claims litigation and damages on account of bodily injury, death or damage to tangible personal property arising in favour or any person, corporation or other entity (including the Indemnified Party) attributable to the Indemnifying Party's performance or non-performance under this Agreement or the SLAs.

b. The indemnities set out in Sub-clause (a) above shall be subject to the following conditions:

   i) the Indemnified Party, as promptly as practicable, informs the Indemnifying Party in writing of the claim or proceedings and provides all relevant evidence, documentary or otherwise;

   ii) the Indemnified Party shall, at the cost and expenses of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the defence of such claim including reasonable access to all relevant information, documentation and personnel. The indemnifying party shall bear cost and expenses and fees of the Attorney on behalf of the Indemnified Party in the litigation, claim.

   iii) if the Indemnifying Party does not assume full control over the defense of a claim as provided in this Article, the Indemnifying Party may participate in such defense at its sole cost and expense, and the Indemnified Party will have the right to defend the claim in such manner as it may deem appropriate, and the cost and expense of the Indemnified Party will be borne and paid by the Indemnifying Party.

   iv. the Indemnified Party shall not prejudice, pay or accept any proceedings or claim, or compromise any proceedings or claim, without the written consent of the Indemnifying Party;

   v. Implementing Agency hereby indemnify & hold indemnified MCGM harmless from & against any & all damages, losses, liabilities, expenses including legal fees & cost of litigation in connection with any action, claim, suit, proceedings as if result of claim made by the third party directly or indirectly arising out of or in connection with this agreement.

vi. all settlements of claims subject to indemnification under this Article will: (a) be entered into only with the consent of the Indemnified Party, which consent will not be unreasonably withheld & include an unconditional release to the Indemnified Party from the claimant for all liability in respect of such claim; & (b) include any appropriate confidentiality agreement prohibiting disclosure of the terms of such settlement;

viii. the Indemnified Party shall take steps that the Indemnifying Party may reasonably require to mitigate or reduce its loss as a result of such a claim or proceedings; &

ix. in the event that the Indemnifying Party is obligated to indemnify an Indemnified Party pursuant to this Article, the Indemnifying Party will, upon payment of such indemnity in full, be subrogated to all rights & defenses of the Indemnified Party with respect to the claims to which such indemnification relates;

x. in the event that the Indemnifying Party is obligated to indemnify the Indemnified Party pursuant to this Article, the Indemnified Party will be entitled to invoke the Performance Bank Guarantee, if such indemnity is not paid, either in full or in part, & on the invocation of the Performance Bank Guarantee, the Indemnifying Party shall be subrogated to all rights & defenses of the Indemnified Party with respect to the claims to which such indemnification relates.

11.10 Publicity

Any publicity by the IMPLEMENTING AGENCY in which the name of MCGM is to be used should be done with the explicit written permission of The Director, IT, Municipal Corporation of Greater Mumbai.

11.11 Warranties

a. The Implementing Agency warrants and represents to MCGM that:
   i. It has full capacity and authority and all necessary approvals to enter into and to perform its obligations under this Agreement;
   ii. This Agreement is executed by a duly authorized representative of the Implementing Agency;
   iii. It shall discharge its obligations under this Agreement with due skill, care and diligence so as to comply with the service level agreement.

b. In the case of the SLAs, the Implementing Agency warrants and represents to MCGM, that:
   i. the Implementing Agency has full capacity and authority and all necessary approvals to enter into and perform its obligations under the SLAs and to provide the Services;
   ii. the SLAs shall be executed by a duly authorized representative of the Implementing Agency;
   iii. the Services will be provided and rendered by appropriately qualified, trained and experienced personnel as mentioned in the Bid Document;
   iv. Implementing Agency has and will have all necessary licenses, approvals, consents of third Parties free from any encumbrances and all necessary technology, hardware and software to enable it to provide the Services;
   v. the Services will be supplied in conformance with applicable laws, enactments, orders and regulations applicable from time to time;
   vi. Implementing Agency will warrant that the solution provided under the contract is new, of the most recent higher version /models and incorporate all recent improvements in design and materials unless provided otherwise in the contract.
   vii. If the Implementing Agency uses in the course of the provision of the Services, components, equipments, software and hardware manufactured by any third party 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.

c. Notwithstanding what has been stated elsewhere in this Agreement and the Schedules attached herein, in the event the Implementing Agency is unable to meet the obligations pursuant to the Project, Operations and Maintenance Services and any related scope of work as stated in this Agreement and the Schedules attached herein, MCGM will have the option to invoke the Performance Guarantee after serving a written notice of thirty (30) days on the Implementing Agency.

11.12 Force Majeure

The Implementing Agency shall not be liable for forfeiture of its Performance Guarantee, imposition of 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. For purposes of this Clause, "Force Majeure" means an event beyond the "reasonable" control of the Implementing Agency , not involving the Implementing Agency 's fault or negligence and not foreseeable. Such events may include Acts of God & acts of Government of India in their sovereign capacity.

For the Implementing Agency to take benefit of this clause it is a condition precedent that the IMPLEMENTING AGENCY must promptly notify MCGM, in writing of such conditions and the cause thereof within 5 calendar days of the Force Majeure event arising. MCGM, or the consultant / committee appointed by MCGM shall study the submission of the Implementing Agency and inform whether the situation can be qualified one of Force Majeure. Unless otherwise directed by MCGM in writing, the Implementing Agency shall continue to perform its obligations under the resultant Agreement as far as it is reasonably practical, and shall seek all reasonable alternative means for performance of services not prevented by the existence of a Force Majeure event.

In the event of delay in performance attributable to the presence of a force majeure event, the time for performance shall be extended by a period(s) equivalent to the duration of such delay. If the duration of delay continues beyond a period of 30 days, MCGM and the Implementing Agency shall hold consultations with each other in an endeavor to find a solution to the problem.

Notwithstanding anything to the contrary mentioned above, the decision of MCGM shall be final and binding on the Implementing Agency.

11.13 Resolution of Disputes

MCGM and the Implementing Agency shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the Agreement. If after 60 days from the commencement of such informal negotiations, MCGM and the IMPLEMENTING AGENCY are unable to resolve amicably such dispute, the matter will be referred to the Municipal Commissioner, and his / her opinion shall be taken as final and binding on the Implementing Agency.

11.14 Risk Purchase Clause

In the event Implementing Agency fails to execute the project as stipulated in the CA, or as per the directions given by MCGM from time to time, MCGM reserves the right to procure similar services from the next eligible bidder or from alternate sources at the risk, cost and responsibility of the Implementing Agency. Before taking such a decision, MCGM shall serve a notice period of 1 month to the Implementing Agency. Implementing Agency's liability in such case would not be higher than 50% of the contract value.

11.15 Limitation of Liability towards MCGM

The Implementing Agency's liability under the resultant Agreement shall be determined as per the Law in force for the time being. The Implementing Agency shall be liable to MCGM for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the Implementing Agency and its employees, including loss caused to MCGM on account of defect in goods or deficiency in services on the part of Implementing Agency or his agents or any person / persons claiming through or under said Implementing Agency. However, such liability of Implementing Agency shall not exceed the total value of the Agreement.

11.16 Conflict of Interest

The Implementing Agency shall disclose to MCGM in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Implementing Agency or its team) in the course of performing the Services as soon as it becomes aware of such a conflict. Implementing Agency shall hold MCGM's interest paramount, without any consideration for future work, and strictly avoid conflict of interest with other assignments.

11.17 Data Ownership

All the data created as the part of the project shall be owned by MCGM. The Implementing Agency shall take utmost care in maintaining security and confidentiality of this data. Access to the data / systems shall be given by the Implementing Agency only to the personnel working on the projects and their names & contact details shall be shared with MCGM in advance. MCGM / its authorized representative(s) shall conduct periodic / surprise security reviews and audits, to ensure the compliance by the Implementing Agency to data / system security.

11.18 Fraud and Corruption

MCGM requires that Implementing Agency must observe the highest standards of ethics during the execution of the contract. In pursuance of this policy, MCGM defines, for the purpose of this provision, the terms set forth as follows:

a) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of MCGM in contract executions.
b) "Fraudulent practice" means a mis-presentation of facts, in order to influence a procurement process or the execution of a contract, to MCGM, and includes collusive practice among bidders (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive MCGM of the benefits of free and open competition.
c) "Unfair trade practices" means supply of services different from what is ordered on, or change in the Scope of Work which is given by MCGM in Volume II.
d) "Coercive Practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of contract.

If it is noticed that the Implementing Agency has indulged into the Corrupt / Fraudulent / Unfair / Coercive practices, it will be a sufficient ground for MCGM for termination of the contract and initiate black-listing of the vendor.

11.19 Exit Management

(i) Exit Management Purpose

This clause sets out the provisions, which will apply during Exit Management period. The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Clause.

The exit management period starts, in case of expiry of contract, at least 3 months prior to the date when the contract comes to an end or in case of termination of contract, on the date when the notice of termination is sent to the Implementing Agency. The exit management period ends on the date agreed upon by MCGM or Three months after the beginning of the exit management period, whichever is earlier.

(ii) Confidential Information, Security and Data

Implementing Agency will promptly on the commencement of the exit management period, supply to MCGM or its nominated agencies the following:

a) Information relating to the current services rendered and performance data relating to the performance of the services; Documentation relating to the Project, Project's Intellectual Property Rights; any other data and confidential information created as part of or is related to this project;
b) Project data as is reasonably required for purposes of the Project or for transitioning of the services to its Replacing Successful Bidder in a readily available format.
c) All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable MCGM and its nominated agencies, or its Replacing Vendor to carry out due diligence in order to transition the provision of the Services to MCGM or its nominated agencies, or its Replacing Vendor (as the case may be).

The Implementing Agency shall retain all of the above information with them for 30 days after the termination of the contract, post which the provider has to wipe/purge/delete all information created or retained as part of this project.

(iii) Employees

Promptly on reasonable request at any time during the exit management period, the Implementing Agency shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to MCGM a list of all employees (with job titles and communication address) of the Successful Bidder, dedicated to providing the services at the commencement of the exit management period; To the extent that any Transfer Regulation does not apply to any employee of the Successful Bidder, MCGM or Replacing Vendor may make an offer of contract for services to such employee of the Successful Bidder and the Successful Bidder shall not enforce or impose any contractual provision that would prevent any such employee from being hired by MCGM or any Replacing Vendor.

(iv) Rights of Access to Information

At any time during the exit management period, the Implementing Agency will be obliged to provide an access of information to MCGM and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / software), documentations, manuals, catalogs, archive data, live data, policy documents or any other material related to VTMS implementation for MCGM.

(v) Exit Management Plan

Successful Bidder shall provide MCGM with a recommended "Exit Management Plan" within 90 days of signing of the contract, which shall deal with at least the following aspects of exit management in relation to the SLA as a whole and in relation to the Project Implementation, the Operation and Management SLA and Scope of work definition.

a) A detailed program of the transfer process that could be used in conjunction with a Replacement Vendor including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;

b) Plans for the communication with such of the Successful Bidder, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer;
c) Plans for provision of contingent support to the Replacement Vendor for a reasonable period (minimum one month) after transfer.
d) Exit Management Plan shall be presented by the Implementing Agency to and approved by MCGM or its nominated agencies.
e) The terms of payment as stated in the Terms of Payment Schedule include the costs of the Implementing Agency complying with its obligations under this Schedule.
f) During the exit management period, the Implementing Agency shall use its best efforts to deliver the services.
g) Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.

11.20 Termination of contract

MCGM may, without prejudice to any other remedy under this Contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 30 days stating the reason for default to the Implementing Agency and as it deems fit, terminate the contract either in whole or in part:

- If the Implementing Agency fails to deliver any or all of the project requirements / operationalization / go-live of project within the time frame specified in the contract; or
- If the Implementing Agency fails to perform any other obligation(s) under the contract.

Prior to providing a notice of termination to the Implementing Agency, MCGM shall provide the Implementing Agency with a written notice of 30 days instructing the Implementing Agency to cure any breach/ default of the Contract, if MCGM is of the view that the breach may be rectified.

On failure of the Implementing Agency to rectify such breach within 30 days, MCGM may terminate the contract by providing a written notice of 30 days to the Implementing Agency, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to MCGM. In such an event the Implementing Agency shall be liable for penalty/liquidated damages imposed by MCGM.

In the event of termination of this contract for any reason whatsoever, MCGM is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the Implementing Agency shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to MCGM and/ or succeeding vendor, as may be required, to take over the obligations of the Implementing Agency in relation to the execution/ continued execution of the requirements of this contract.

11.21 Miscellaneous

a) Confidentiality

"Confidential Information" means all information including Project Data (whether in written, oral, electronic or other format) which relates to the technical, financial and operational affairs, business rules, citizen information, design rights, know-how and personnel of each Party and its affiliates which is disclosed to or otherwise learned by the other Party or its subcontractors (whether a Party to the contract or to the SLA) in the course of or in connection with the contract (including without

limitation such information received during negotiations, location visits and meetings in connection with the contract or to the SLA) or pursuant to the contract to be signed subsequently.

Except with the prior written permission of MCGM, the Implementing Agency (including all partners) and its Personnel shall not disclose such confidential information to any person or entity not expected to know such information by default of being associated with the project, nor shall the Implementing Agency and it's Personnel make public the recommendations formulated in the course of, or as a result of the Project. In matters pertaining to privacy of data, the Implementing Agency (including all partners) shall not use any data for analytical/commercial reasons whatsoever.

The Implementing Agency recognizes that during the term of this Agreement, sensitive data will be procured & made available to it, its Sub contractors & agents & others working for or under the Implementing Agency. Disclosure or usage of the data by any such recipient may constitute a breach of law applicable causing harm not only to the Department whose data is used but also to its stakeholders. The function of MCGM requires the Implementing Agency, its Subcontractors & agents to demonstrate utmost care, sensitivity & strict confidentiality. Any breach of this Article will result in MCGM & its nominees receiving a right to seek injunctive relief & damages, from the Implementing Agency.

The restrictions of this Article shall not apply to confidential Information that:

i. is or becomes generally available to the public through no breach of this Article by the Recipient; &
ii. was in the recipient's possession free of any obligation of confidence prior to the time of receipt of it by the Recipient hereunder; &
iii. is developed by the Recipient independently of any of discloser's Confidential Information; &
iv. is rightfully obtained by the Recipient from third Parties authorized at that time to make such disclosure without restriction; &
v. is identified in writing by the Discloser as no longer proprietary or confidential; or vi. is required to be disclosed by law, regulation or Court Order, provided that the recipient gives prompt written notice to the Discloser of such legal & regulatory requirement to disclose so as to allow the Discloser reasonable opportunity to contest such disclosure.

To the extent that such disclosure is required for the purposes of this Agreement, either Party may disclose Confidential Information to:

i. its employees, agents & independent contractors & to any of its affiliates & their respective independent contractors or employees; &
ii. its professional advisors & auditors, who require access for the purposes of this Agreement, whom the relevant Party has informed of its obligations under this Article & in respect of whom the relevant Party has informed of its obligations under this Article has used commercially reasonable efforts to ensure that they are contractually obliged to keep such Confidential Information confidential on terms substantially the same as set forth in this Article. Either Party may also disclose confidential Information or any entity with the other Party's prior written consent.

The provisions of this Article shall survive the expiration or any earlier termination of this Agreement.

b) Standards of Performance

The Implementing Agency shall provide the services and carry out their obligations under the Contract with due diligence, efficiency and professionalism/ethics in accordance with generally accepted professional standards and practices. The Implementing Agency shall always act in respect of any matter relating to this contract. The Implementing Agency shall abide by all the provisions / Acts / Rules / Regulations, Standing orders, etc of Information Technology as prevalent in the country. The Implementing Agency shall also conform to the standards laid down by Government of Maharashtra or Government of India from time to time.

c) Sub Contracts

All the personnel working on the project and having access to the Servers / data should be on payroll of the Implementing Agency. The Implementing Agency shall take prior approval from MCGM for sub-contracting any work, if not already specified in the proposal and approved by MCGM. Such sub-contracting shall not relieve the Implementing Agency from any liability or obligation under the Contract. The Implementing Agency shall be solely responsible for the work carried out by subcontracting under the contract.

d) Care to be taken while working at MCGM Office

Implementing Agency should follow instructions issued by concerned Competent Authority from time to time for carrying out work at designated places. Implementing Agency should ensure that there is no damage caused to any private or public property. In case such damage is caused, Implementing Agency shall immediately bring it to the notice of concerned organization and MCGM in writing and pay necessary charges towards fixing of the damage.

Implementing Agency shall ensure that its employees/representatives don't breach privacy of any citizen or establishment during the course of execution or maintenance of the project.

e) Compliance with Labour regulations

The Implementing Agency shall pay fair and reasonable wages to the workmen employed, for the contract undertaken and comply with the provisions set forth under the Minimum wages Act and the Contract Labour Act 1970. The salary of the manpower working on MCGM project should be paid using ECS / NEFT / RTGS. A record of the payments made in this regard should be maintained by the Implementing Agency. Upon request, this record shall be produced to the appropriate authority in MCGM and/or Judicial Body. If complaints are received by MCGM (or any appropriate authority) appropriate action (Liquidation of Security Deposit, Blacklisting, etc.) may be initiated as deemed necessary against the Implementing Agency.

f) Independent Contractor

Nothing in this Agreement shall be construed as establishing or implying any partnership or joint venture or employment relationship between the Parties to this Agreement. Except as expressly stated in this Agreement, nothing in this Agreement shall be deemed to constitute any Party as the agent of any other Party or authorizes either Party (i) to incur any expenses on behalf of the other Party, (ii) to enter into any engagement or make any representation or warranty on behalf of the other Party, (iii) to pledge the credit of or otherwise bind or oblige the other Party, or (iv) to commit the other Party in any manner whatsoever in each case without obtaining the other Party's prior written consent.

g) Waiver

A waiver of any provision or breach of this Agreement must be in writing and signed by an authorized official of the Party executing the same. No such waiver shall be construed to affect or imply a subsequent waiver of the same provision or subsequent breach of this Agreement.

h) Notices

Any notice or other document, which may be given by either Party under this Agreement, shall be given in writing in person or by pre-paid recorded delivery post.

In relation to a notice given under this Agreement, any such notice or other document shall be addressed to the other Party's principal or registered office address as set out below

MCGM:

Director, IT

Municipal Corporation of Greater Mumbai, Engineering Hub Bldg., Dr. E. Moses Road, Worli Naka, Worli, Mumbai - 16

Tel: ----------

Fax: ----------

Implementing Agency:

Tel: ----------

Fax: ----------

Any notice or other document shall be deemed to have been given to the other Party when delivered (if delivered in person) if delivered between the hours of 9.30 am and 5.30 pm at the address of the other Party set forth above or on the next working day thereafter if delivered outside such hours, and 7 calendar days from the date of posting (if by letter).

i) Personnel/Employees

i. Personnel/employees assigned by Implementing Agency to perform the services shall be employees of Implementing Agency and/or its sub-contractors, & under no circumstances will such personnel be considered as employees of MCGM. Implementing Agency shall have the sole responsibility for supervision & control of its personnel & for payment of such personnel's employee's entire compensation, including salary, legal deductions withholding of income taxes & social security taxes, worker's compensation, employee & disability benefits & the like & shall be responsible for all employer obligations under all laws as applicable from time to time. MCGM shall not be responsible for the above issues concerning to personnel of Implementing Agency.

ii. Implementing Agency shall use its best efforts to ensure that sufficient Implementing Agency personnel are employed to perform the Services, & that, such personnel have appropriate qualifications to perform the Services. MCGM or its nominated agencies shall have the right to require the removal or replacement of any Implementing Agency personnel performing work under this Agreement. In the event that MCGM requests that any Implementing Agency personnel be replaced, the substitution of such personnel shall be accomplished pursuant to a mutually agreed upon schedule & upon clearance of the personnel based on profile review & upon schedule & upon clearance of the personnel based on profile review & personal interview by MCGM or its nominated agencies, within not later than 30 working days. Implementing Agency shall depute quality team for the project & as per requirements MCGM shall have the right to ask Implementing Agency to change the team.

iii. Management (Regional Head / VP level officer) of Implementing Agency needs to be involved in the project monitoring & should attend the review meeting at least once in a month.

iv. The profiles of resources proposed by Implementing Agency in the technical proposal, which are considered for Technical bid evaluation, shall be construed as 'Key Personnel' & the Implementing Agency shall not remove such personnel without the prior written consent of MCGM. For any changes to the proposed resources, Implementing Agency shall provide equivalent or more experienced resources in consultation with MCGM.

v. Except as stated in this clause, nothing in this Agreement will limit the ability of Implementing Agency freely to assign or reassign its employees; provided that Implementing Agency shall be responsible, at its expense, for transferring all appropriate knowledge from personnel being replaced to their replacements. MCGM shall have the right to review & approve Implementing Agency's plan for any such knowledge transfer. Implementing Agency shall maintain the same standards for skills & professionalism among replacement personnel as in personnel being replaced.

vi. Each Party shall be responsible for the performance of all its obligations under this Agreement & shall be liable for the acts & omissions of its employees & agents in connection therewith.

j) Variations & Further Assurance

a. No amendment, variation or other change to this Agreement or the SLAs shall be valid unless made in writing & signed by the duly authorized representatives of the Parties to this Agreement.

b. Each Party to this Agreement or the SLAs agree to enter into or execute, without limitation, whatever other agreement, document, consent & waiver & to do all other things which shall or may be reasonably required to complete & deliver the obligations set out in the Agreement or the SLAs.

k) Severability & Waiver

i. if any provision of this Agreement or the SLAs, or any part thereof, shall be found by any court or administrative body of competent jurisdiction to be illegal, invalid or unenforceable the illegality, invalidity or unenforceability of such provision or part provision shall not affect the other provisions of this Agreement or the SLAs or the remainder of the provisions in question which shall remain in full force & effect. The relevant Parties shall negotiate in good faith in order to agree to substitute for any illegal, invalid or unenforceable provision a valid & enforceable provision which achieves to the greatest extent possible the economic, legal & commercial objectives of the illegal, invalid or unenforceable provision or part provision within 7 working days.

ii. No failure to exercise or enforce & no delay in exercising or enforcing on the part of either Party to this Agreement or the SLAs of any right, remedy or provision of this Agreement or the SLAs shall operate as a waiver of such right, remedy or provision in any future application nor shall any single or partial exercise or enforcement of any right, remedy or provision preclude any other or further exercise or enforcement of any other right, remedy or provision.

l) Survivability

The termination or expiry of this Agreement or the SLAs for any reason shall not affect or prejudice any terms of this Agreement, or the rights of the Parties under them which are either expressly of by implication intended to come into effect or continue in effect after such expiry or termination.

11.22 Applicable Law

The contract shall be governed by the laws and procedures prescribed by the Laws prevailing and in force in India, within the framework of applicable legislation and enactment made from time to time

concerning such commercial dealings/processing. All legal disputes are subject to the jurisdiction of Mumbai courts only.

Signed, sealed and delivered
By ----------
----------,
For and on behalf of Municipal Corporation of Greater Mumbai

Signed, sealed and delivered
By ----------
For and on behalf of the "Implementing Agency",

Witnesses:
(1)
(2)

Attachments to the Agreement:

i) Scope of Services for the Implementing Agency (Annexure I)
ii) Detail Commercial proposal of the Implementing Agency accepted by MCGM (Annexure II)
iii) Corrigendum Document published by MCGM subsequent to the Bid Document for this work (Annexure III)
iv) Bid Document of MCGM for this work (Annexure IV)
v) LoI issued by MCGM to the successful bidder (Annexure V)
vi) The successful bidder's "Technical Proposal" and "Commercial Proposal" submitted in response to the Bid Document (Annexure VI)

12 Annexure VI: List of Approved Banks

1. The following Banks with their branches in Greater Mumbai and upto Virar and Kalyan have been approved only for the purpose of accepting Banker's guarantee from 1997-98 onwards until further instructions.
2. The Banks Guarantee issued by branches of approved banks beyond Kalyan and Virar can be accepted only if the said Bankers" Guarantee is countersigned by the Manager of a Branch of the same bank, within the Mumbai Limit categorically endorsing thereon that the said bankers guarantee is binding on the endorsing Branch of the Bank within Mumbai limits and is liable to be enforced against the said branch of the Bank, in case of default by the contractor / supplier furnishing the Bankers Guarantee.

List of approved Banks

(A) S.B.I. & its subsidiary banks

1. State Bank of India
2. State Bank of Bikaner & Jaipur
3. State Bank of Hyderabad
4. State Bank of Mysore
5. State Bank of Patiala
6. State Bank of Saurashtra
7. State Bank of Travenkore
8. State Bank of Indore

(B) NATIONALIZED BANKS

9. Allahabad Bank
10. Andhra Bank
11. Bank of Baroda
12. Bank of India
13. Bank of Maharashtra
14. Central Bank of India
15. Dena Bank
16. Indian Bank
17. Indian Overseas Bank
18. Oriental Bank of commerce
19. Punjab National Bank
20. Punjab & Sind Bank
21. Syndicate Bank
22. Union Bank of India
23. United Bank of India
24. UCO Bank
25. Vijaya Bank
26. Corporation Bank
27. Canara Bank

(C) SCHEDULED COMMERCIAL BANKS

28. Bank of Madura Ltd.
29. Bank of Rajasthan Ltd.
30. Banaras State Bank Ltd.

31. Bharat Overseas Bank Ltd.
32. Catholic Syrian Bank Ltd.
33. City Union Bank Ltd.
34. Development Credit Bank
35. Dhanalakshmi Bank Ltd.
36. Federal Bank Ltd
37. Indus ind Bank Ltd.
38. I.C.I.C.I. Banking Corporation Ltd.
39. Global Trust Bank Ltd.
40. Jammu & Kashmir Bank Ltd.
41. Karnataka Bank Ltd.
42. Karur Vysya Bank Ltd.
43. Laxmi Vilas Bank Ltd
44. Nedungadi Bank Ltd
45. Ratnakar Bank ltd.
46. Sangli Bank Ltd.
47. South Indian Bank Ltd.
48. S.B.I. Commercial & Int. Bank Ltd.
49. Tamil land Mercantile Bank Ltd.
50. United Western Bank Ltd.
51. Vysya Bank Ltd.
52. Axis Bank
53. Yes Bank
54. HDFC Bank
55. Kotak Mahindra Bank Ltd
56. IDBI Bank

(D) SCHEDULED URBAN CO-OP BANKS

57. Abhyudaya Co-Op. Bank Ltd.
58. Bassein Catholic Co-Op. Bank Ltd
59. Bharat Co-Op. Bank Ltd.
60. Bombay Mercantile Co-Op. Bank Ltd.
61. Cosmos Co-Op. Bank Ltd.
62. Greater Mumbai Co-Op. Bank Ltd.
63. Janata Sahakari Bank Ltd.
64. The Mumbai District Central Co-Op. Bank Ltd.
65. The Maharashtra State Co-Op. Bank
66. New India Co-Op. Bank Ltd.
67. North Canara G.S.B. Co-Op. Bank Ltd.
68. Rupee Co-Op. Bank Ltd.
69. Sangli Urban Co-Op. Bank Ltd.
70. Saraswat Co-Op. Bank Ltd.
71. Shamrao Vitthal Co-Op. Bank Ltd.

72. Mahangar Co-Op. Bank Ltd.
73. Citizen Bank Ltd.
74. Punjab and Maharashtra Co-Op Bank Ltd
75. Thane Janata Sahakari Bank Ltd

(E) FOREIGN BANKS

76. ABN AMRO BANK N.V.
77. American Express Bank Ltd.
78. ANZ Grindlays Bank
79. Bank of America NT & SA
80. Bank of Tokyo Ltd.
81. Banque Indosuez
82. Banque National De Paris
83. Barclays Bank
84. Citi Bank N.A.
85. Hongkong & Shanghai Banking Corporation Ltd.
86. Mitsui Taiyokbe Bank Ltd.
87. Standard Chartered Bank
88. CHO-Hung Bank

13 Annexure VII: Draft Non-Disclosure Agreement

This Non-Disclosure Agreement ("Non-Disc") is made and entered into _____ day of _____ month _____ year (effective date) by and between MCGM ("Department") and _____ ("Company")

Whereas, Department and Company have entered into an Agreement ("Agreement") _____ effective _____ for _____; and

Whereas, each party desires to disclose to the other party certain information in oral or written form which is proprietary and confidential to the disclosing party, ("CONFIDENTIAL INFORMATION").

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements contained herein, the parties agree as follows:

1. **Definitions.** As used herein:

(a) The term “Confidential Information” shall include, without limitation, all information and materials, furnished by either Party to the other in connection with citizen/users/persons/customers data, products and/or services, including information transmitted in writing, orally, visually, (e.g. video terminal display) or on magnetic or optical media, and including all proprietary information, customer & prospect lists, trade secrets, trade names or proposed trade names, methods and procedures of operation, commercial or marketing plans, licensed document know-how, ideas, concepts, designs, drawings, flow charts, diagrams, quality manuals, checklists, guidelines, processes, formulae, source code materials, specifications, programs, software packages, codes and other intellectual property relating to the disclosing party’s data, computer database, products and/or services. Results of any tests, sample surveys, analytics, data mining exercises or usages etc. carried out by the receiving party in connection with the Department’s Information including citizen/users/persons/customers personal or sensitive personal information as defined under any law for the time being in force shall also be considered Confidential Information.

(b) The term, “Department” shall include the officers, employees, agents, consultants, contractors and representatives of Department.

(c) The term, “Company” shall include the directors, officers, employees, agents, consultants, contractors and representatives of Company, including its applicable affiliates and subsidiary companies.

2. Protection of Confidential Information. With respect to any Confidential Information disclosed to it or to which it has access, Company affirms that it shall:

(a) Use the Confidential Information as necessary only in connection with Project and in accordance with the terms and conditions contained herein;

(b) Maintain the Confidential Information in strict confidence and take all reasonable steps to enforce the confidentiality obligations imposed hereunder, but in no event take less care with the Confidential

Information that the parties take to protect the confidentiality of its own proprietary and confidential information and that of its clients;

(c) Not to make or retain copy of any commercial or marketing plans, citizen/users/persons/customers database, Proposals developed by or originating from Department or any of the prospective clients of Department except as necessary, under prior written intimation from Department, in connection with the Project, and ensure that any such copy is immediately returned to Department even without express demand from Department to do so;

(d) Not disclose or in any way assist or permit the disclosure of any Confidential Information to any other person or entity without the express written consent of the other party; and

(e) Return to the other party, or destroy, at Department's discretion, any and all Confidential Information disclosed in a printed form or other permanent record, or in any other tangible form (including without limitation, all copies, notes, extracts, analyses, studies, summaries, records and reproductions thereof) immediately upon the earlier to occur of (i) expiration or termination of either party's engagement in the Project, or (ii) the request of the other party therefore.

(f) Not to discuss with any member of public, media, press, any or any other person about the nature of arrangement entered between Department and Company or the nature of services to be provided by the Company to the Department.

3. **Onus.** Company shall have the burden of proving that any disclosure or use inconsistent with the terms and conditions hereof falls within any of the following exceptions.

4. **Exceptions.** These restrictions as enumerated in section 1 of this Agreement shall not apply to any Confidential Information:

(a) Which is independently developed by Company or lawfully received from another source free of restriction and without breach of this Agreement; or

(b) After it has become generally available to the public without breach of this Agreement by Company; or

(c) Which at the time of disclosure to Company was known to such party free of restriction and evidenced by documentation in such party's possession; or

(d) Which Department agrees in writing is free of such restrictions.

(e) Which is received from a third party not subject to the obligation of confidentiality with respect to such Information;

5. **Remedies.** Company acknowledges that (a) any actual or threatened disclosure or use of the Confidential Information by Company would be a breach of this agreement and may cause immediate and irreparable harm to Department; (b) Company affirms that damages from such disclosure or use by it may be impossible to measure accurately; and (c) injury sustained by Department may be impossible to calculate and remedy fully. Therefore, Company acknowledges that in the event of such a breach, Department shall

be entitled to specific performance by Company of Company's obligations contained in this Agreement. In addition Company shall indemnify Department of the actual and liquidated damages which may be demanded by Department. Moreover, Department shall be entitled to recover all costs (including reasonable attorneys' fees) which it or they may incur in connection with defending its interests and enforcement of legal rights arising due to a breach of this agreement by Company.

6. **Need to Know**. Company shall restrict disclosure of such Confidential Information to its employees and/or consultants with a need to know (and advise such employees of the obligations assumed herein), shall use the Confidential Information only for the purposes set forth in the Agreement, and shall not disclose such Confidential Information to any affiliates, subsidiaries, associates and/or third party without prior written approval of the disclosing party.

7. **Intellectual Property Rights Protection.** No license to a party, under any trademark, patent, copyright, design right, mask work protection right, or any other intellectual property right is either granted or implied by the conveying of Confidential Information to such party.

8. **No Conflict**. The parties represent and warrant that the performance of its obligations hereunder do not and shall not conflict with any other agreement or obligation of the respective parties to which they are a party or by which the respective parties are bound.

9. **Authority.** The parties represent and warrant that they have all necessary authority and power to enter into this Agreement and perform their obligations hereunder.

10. **Dispute Resolution.** If any difference or dispute arises between the Department and the Company in connection with the validity, interpretation, implementation or alleged breach of any provision of this Agreement, any such dispute shall be referred to Municipal Commissioner, MCGM

    (a) The arbitration proceedings shall be conducted in accordance with the (Indian) Arbitration & Conciliation Act, 1996 & amendments thereof.

    (b) The place of arbitration shall be Mumbai.

    (c) The arbitrator's award shall be substantiated in writing and binding on the parties.

    (d) The proceedings of arbitration shall be conducted in English language.

    (e) The arbitration proceedings shall be completed within a period of 180 days from the date of reference of the dispute to arbitration.

11. **Governing Law.** This Agreement shall be interpreted in accordance with and governed by the substantive and procedural laws of India and the parties hereby consent to the exclusive jurisdiction of Courts and/or Forums situated at Mumbai, India only.

12. **Entire Agreement.** This Agreement constitutes the entire understanding and agreement of the parties, and supersedes all previous or contemporaneous agreement or communications, both oral and written, representations and under standings among the parties with respect to the subject matter hereof.

13. **Amendments.** No amendment, modification and/or discharge of this Agreement shall be valid or binding on the parties unless made in writing and signed on behalf of each of the parties by their respective duly authorized officers or representatives.

14. **Binding Agreement.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

15. **Severability**. It is the intent of the parties that in case any one or more of the provisions contained in this Agreement shall be held to be invalid or unenforceable in any respect, such provision shall be modified to the extent necessary to render it, as modified, valid and enforceable under applicable laws, and such invalidity or unenforceability shall not affect the other provisions of this Agreement.

16. **Waiver.** If either party should waive any breach of any provision of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision hereof.

17. **Survival.** Both parties agree that all of their obligations undertaken herein with respect to Confidential Information received pursuant to this Agreement shall survive till perpetuity even after any expiration or termination of this Agreement.

18. **Non-solicitation.** During the term of this Agreement and thereafter for a further period of two (2) years Company shall not solicit or attempt to solicit Department's employees and/or consultants, for the purpose of hiring/contract or to proceed to conduct operations/business similar to Department with any employee and/or consultant of the Department who has knowledge of the Confidential Information, without the prior written consent of Department. This section will survive irrespective of the fact whether there exists a commercial relationship between Company and Department.

19. **Term.** Subject to aforesaid section 17, this Agreement shall remain valid up to 2 years from the "effective date".

IN WITNESS HEREOF, and intending to be legally bound, the parties have executed this Agreement to make it effective from the date and year first written above.

For Department,	For Company
_____	_____
Name:	Name:
Title:	Title:

WITNESSES:

1.

2.

14 Annexure VIII: Authorisation letter for attending pre-bid meeting / bid opening

(to be provided on the letter head of Bidder)

No..... Date.....

To
The.....
Municipal Corporation of Greater Mumbai,
Mumbai.

Sub: Bid No..... due date.....

Sir,

We here by authorize Mr./Ms. .....as our authorized representative, to represent us on the following occasion:-

i. Pre-bid Meeting to be held on.....at.....a.m./p.m.

ii. Bid Opening on..... at..... a.m. /p.m.

Kindly permit him to attend the same.

Yours faithfully,

Signature:

Name of signatory:

Designation:

Rubber Stamp: