REQUEST FOR PROPOSAL FOR

SELECTION OF IMPLEMENTATION AGENCY FOR DESIGN & DEVELOPMEMENT OF ENTERPRISE MANAGEMENT SYSTEM & BUSINESS INTELLIGENCE SOFTWARE SOLUTION FOR SURAT CITY BRTS PROJECTS OF SURAT MUNICIPAL CORPORATION

Tender Number: GM(TRANSIT)/SSCDL/BRTS/4/2022-2023

Last date for Online Price Bid Submission: 06.01.2023

Last date for Technical Bid Submission: 06.01.2023



Invited by
Surat Smart City Development Limited
115, Smart City Cell, Surat Municipal Corporation,
Muglisara, Main Road, Surat – 395003, Gujarat.

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1 Disclaimer

The information contained in this Request for Proposal document ("RFP") whether subsequently provided to the bidders, ("Bidder/s") verbally or in documentary form by Surat Smart City Development Limited (henceforth referred to as "SSCDL" in this document) or any of its employees or advisors, is provided to Bidders on the terms and conditions set out in this Tender document and any other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is not an offer or invitation to any party. The purpose of this RFP is to provide the Bidders or any other person with information to assist the formulation of their financial offers ("**Bid**"). This RFP includes statements, which reflect various assumptions and assessments arrived at by SSCDL in relation to this scope. This Tender document does not purport to contain all the information each Bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for the Chief Executive Officer, SSCDL and their employees or advisors to consider the objectives, technical expertise and particular needs of each Bidder. The assumptions, assessments, statements and information contained in the Bid documents, may not be complete, accurate, adequate or correct. Each Bidder must therefore conduct its own analysis of the information contained in this RFP and to seek its own professional advice from appropriate sources.

Information provided in this Tender document to the Bidder is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. SSCDL accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein.

SSCDL and their employees and advisors make no representation or warranty and shall incur no liability to any person, including the Bidder under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.

SSCDL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. SSCDL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

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

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

2 Glossary and Definitions

Terms	Meaning
AFCS	Automated Fare Collection System
BIS/BI	Business Intelligence Software Solution
BoQ	Bill of Quantity
CMDB	Configuration Management Database
DC	Data Centre
EMS	Enterprise Management System
GUI	Graphical User Interface
ICCC	Surat Urban Observatory and Emergency Response Center (ICCC)
ITIL	Information Technology Infrastructure Library
KPI	Key Performance Indicator
MTTR	Mean Time to Repair
O&M	Operation and Maintenance
OS	Operating System
POS	Point of Sale
RFP	Request for Proposal
SMAC	SMART City Centre
SI	System Integrator
SLA	Service Level Agreement
SMC	Surat Municipal Corporation
SSCDL	Surat Smart City Development Limited
ETL	Extract, Transform and Load
SNMP	Simple Network Management Protocol
NMS	Network Management System

3 Notice Inviting Bid



Surat Smart City Development Limited (SSCDL)

1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India



SELECTION OF IMPLEMENTATION AGENCY FOR DESIGN & DEVELOPMEMENT OF ENTERPRISE MANAGEMENT SYSTEM & BUSINESS INTELLIGENCE SOFTWARE SOLUTION FOR SURAT CITY BRTS PROJECTS OF SURAT MUNICIPAL CORPORATION GM(TRANSIT)/SSCDL/BRTS/4/2022-2023

Bid for Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation is invited online on https://smc.nprocure.com from the bidder meeting the basic eligibility criteria as stated in the bid document.

meeting the basic enginity effects as stated in the bld document.				
Bid Fee (Non-refundable)	Rs.7,080/- (Rs. 6,000 + 18% GST) by Demand Draft or Banker's Cheque			
EMD	The bidder should pay EMD of Rs. 4,50,000 (Rupees Seventy five lakhs only) in the form of Demand Draft or in the form of irrevocable Bank guarantee (BG) from any approved nationalized / scheduled banks with validity of 180 days from the date of Bid opening in favour of "Surat Smart City Development Limited". The list of approved bank is specified in Annexure VI.			
Last date of submit the Pre- Bid Queries	By email to brts@suratmunicipal.gov.in on or before 31.12.2022, 16:00 hrs.			
Online Price Bid End Date	Till 06/01/2023 up to 18:00 hrs.			
Online Technical Bid Submission along with Scanned copy EMD & Bid fee including Technical Bid Documents	Till 06/01/2023 up to 18:00 hrs.			
Technical Bid Submission (in Hard Copy) along with EMD & Bid fee	In sealed envelope strictly by RPAD/Postal Speed Post On or before 10/01/2023 up to 17:00 hrs. To the Chief Accounts, Surat Municipal Corporation, Muglisara, Surat – 395003, Gujarat by RPAD or Speed Post Only.			
RFP Document Availability	https://smc.nprocure.com, http://suratsmartcity.com/Tenders,			

The right to accept/reject any or all bid(s) received is reserved without assigning any reason thereof.

General Manager (Transit) Surat Smart City Development Ltd

4 Introduction and Background

4.1 About Surat

Surat is located in western part of India in the state of Gujarat, Surat is referred as the silk city and the diamond city. It has the most vibrant present and an equally varied heritage of the past. Surat is also known as economic capital of Gujarat and is having one of the highest growth rates amongst Asian cities. As per the Census 2011, it is the eighth largest city in the country with population of 4.48 million population. On the scale of population growth, Surat is the fastest growing city in Asia and holds 4th rank in the world. On the economic front, Surat holds top position with highest per house-hold income in the country

Surat has been selected at 4^{th} position as one of the twenty Indian cities (in the first round of selection) to be developed as a smart city under Smart Cities Mission.

4.2 About Surat Municipal Corporation

The Surat Municipal Corporation (SMC) has responded to the challenges of fastest population growth and high-speed economic development by adopting the best urban management practices. The administration of SMC with the help of the people and elected members of the city has transformed Surat to one of the cleanest cities of India. SMC has taken all necessary steps to make the city a better place to live with all amenities. SMC has taken up many path breaking initiatives and these efforts have been acknowledged at national and international level.

Utilization of Information Technology (e-Governance)

SMC had harnessed the power of IT before it became ubiquitous and a necessity for organizations of its nature and size. SMC is one of the few local self-government to adopt computerization in its early phases and use it for better governance, improving operational efficiency and increasing ease of interaction with citizens. SMC has initiated various e-Governance and m-Governance projects. The same have been recognized at national/international level. Following is the list of awards received in recent past:

- 'Project Award' to Surat Smart City's 'One City One Card Digitalization for cashless travel by integration of Automatic Fare Collection System with Surat Money Card' under 'Mobility & Transportation' Category by MoHUA in'India Smart Cities Awards 2019' in January 2020
- 2. 'Smart Project Award' to Surat Smart City's 'Automatic Fare Collection System (AFCS)' under 'Smart Transportation' Category by Smart Cities Council India in September 2019
- 3. 'Digital India Award' for 'Open Data Initiative' under 'Open Data Champion' Category by Ministry of Electronics and Information Technology, Govt. of India in February 2019
- 4. 'City Award' to Surat Smart City for showing best momentum in implementation of projects under 'India Smart Cities Award' 2018 by MoHUA in July 2018
- 'Project Award' to Surat Smart City's Integrated Transit Management System (ITMS) under 'Transport and Mobility' Category of 'India Smart Cities Award' 2018 by MoHUA in July 2018
- 6. 'Smart Project Awards' for SMAC Centre and ITMS projects by Smart City Council of India, March 23, 2018
- 7. SKOCH 'Order-of-Merit' Award for Surat Smart City's Project Management System, 2018

- 8. Digital Leader of the Year Award, 2017
- 9. National e-Governance Award, 2017
- 10. Business World Smart Cities Award 2016-Dec, '16
- 11. Digital India Award 2016 (Platinum Icon)-Dec, '16
- 12. IT Innovation & Excellence 2016 Award-Oct, '16
- 13. Express IT Award 2015 (Bronze) For SMC Mobile App
- 14. Vodafone Mobile for Good Award 2014 to Citizen's Connect SMC Mobile App
- 15. Skoch Order-of-Merit to Citizen's Connect SMC Mobile App
- 16. mBillionth Award South Asia 2014 to Citizen's Connect SMC Mobile App
- 17. HUDCO Award for Best Practices to Improve the Living Environment 2013-14 for Mobile App & Virtual Civic Center (Online Services)
- 18. Skoch Gold Award & Order-of-Merit for Use of e-Governance for Improved Service Delivery
- 19. The Janaagraha G2C Award 2012 for Best website under the category "Transparency and Accountability"
- 20. City Civic Centre won the National Award for e-Governance 2007-08 (Bronze) for Outstanding Performance in Citizen Centric Service Delivery
- 21. Golden Jubilee Memorial Trust Awards 2007-08 for Outstanding Utilisation of Communication & Information Technology from Southern Gujarat Chamber of Commerce
- 22. The Grievance Redressal System awarded the Best Practice Award by CMAG & FIRE[D]
- 23. Certificate of Merit by NIUA FIRE(D) for the best website in the year 2001

4.3 About Surat Smart City Development Limited (SSCDL)

As per the GoI guidelines, Surat Municipal Corporation has formed a separate Special Purpose Vehicle (SPV) as Surat Smart City Development Ltd. (SSCDL) for the implementation of projects under the smart city mission for the city of Surat. This SPV shall carry end to end responsibility for vendor selection, implementation and operationalization of various smart city projects.

4.4 Project Background

Automated Fare Collection System (AFCS)

Surat Smart City Development Limited (SSCDL) has implemented Automated Fare Collection System (AFCS) project in Surat city under the purview of Smart city initiative. Under the scope of AFCS project, SSCDL has implemented one of the advance mechanisms and technology for Automated fare collection system within the public transport ecosystem (BRTS and City Bus services) of Surat city. The AFCS project intended to enhance the operational capability, reliability and ease of operations for fare management system for public transport within Surat city.

Although, the AFCS project is in operation since August-2019, automated centralized monitoring of the field equipments are critical for smooth operations and managing the service level benchmarks. Being a large ecosystem AFCS project is constitute various hardware and software components which are dependent on each other. Thus, to run the entire AFCS system with maximum efficiency with minimum downtime it is essential to monitor and analyse the working status of each component of AFCS ecosystem in Real time scenario.

Intelligent Transit Management System (ITMS)

Surat Smart City Development Limited (SSCDL) has implemented a city-wide integrated system – "Intelligent Transit Management System" (ITMS), to manage diverse set of transportation needs for the city.

SSCDL has intended to implement "*Enterprise Management System (EMS)*" for operational and assessment of the Service Level Benchmarks of different components implemented under the scope of AFCS project and "Business Intelligent Software Solution (BIS Solution)" for analyses generated data-lake from the ITMS and AFCS systems and provide a management dashboard view with useful operational information along with trend analysis and patterns on need based requirements from the implemented software/portals/modules under the scope of AFCS and ITMS project.

In this regard to the above, SSCDL intends to selection of the System Integrator (SI) for Design, Development, Supply, Installation, Integration, Testing and Commissioning of the **EMS** – **Enterprise Management System and Business Intelligence System** with operation & maintenance of the period 5 years from the date of system acceptance.

4.5 Project objectives

The key objectives to implement the **EMS System** are:

- 1. To monitor and analyse the operational status (Health monitoring status) of the SNMP/IP enabled hardware and Software components implemented under the scope of AFCS project.
- 2. To assessment the useability of the key components (Software/Hardware) implemented under the scope of AFCS project and thereby appropriate measures shall be provisioned to enhance their operational efficiency.
- 3. To generate Real time alerts for technical issues and thereby reduce the downtime of AFCS components.
- 4. To facilitate the end user to collect data and conduct detail root-cause analysis (RCA) to identify the fault if any observed in the hardware/software implemented under the scope of the AFCS project.
- 5. To facilitate End User to Manage Service Level Agreement (SLA)'s of AFCS project as well as EMS project as per defined terms and generate reports for the same.
- 6. To generate multiple types of reports including some customized report for better analysis and representation.

The key objectives of the **Business Intelligent Software Solution** are:

- 1. Integration and Consolidation of all the Software modules associated with smart components of Public Transportation i.e., Intelligent Transit Management System and Automatic Fare Collection System
- 2. Analyse real time as well as historic data and provide a management dashboard view along with trend analysis and patterns of various Key performance indicators.
- 3. Enables management/authority to navigate, understand and investigate data elements to make informed decisions.
- 4. Interactive visualization of all the Transit related characteristics for the real time decision making.
- 5. Analytics reports and dashboard for Bus Operations of public/BRTS bus fleet operated by SMC & Sitilink, etc.

4.6 Project coverage

EMS System

The scope of work includes Design, Development, Supply, Installation, Integration, Testing and Commissioning and Maintenance of "Enterprise Management System (EMS)" for AFCS Project components implemented within Surat City. The requirement mentioned in this RFP calls for a complete working system and not components thereof. Therefore, the proposed solution in the Bid must be complete with all components and required accessories for complete installation & commissioning of the System as per the scope of work mentioned in this RFP. Project coverage will include SITC of EMS application, centralized hardware & Storage for computing, Training, and comprehensive onsite warranty and O&M support for 5 years in an efficient and effective manner.

Business Intelligent Software Solution

The scope of work includes Design, Development, Supply, Installation, Integration, Testing and Commissioning with Operation & Maintenance of "Business Intelligent Software Solution (BIS Solution)" for AFCS Project components implemented within Surat City.

4.7 Key Stakeholders

The implementation and successful execution of this project will require support and involvement from multiple stakeholders. The project requires collaboration between multiple stakeholders for its successful execution. It is therefore important to understand the various stakeholders envisioned to be part of this project. Following are the critical stakeholders whose involvement will drive the project and enable the establishment of a strong project governance:

- 1. Surat Municipal Corporation (SMC)
- 2. Surat Smart City Development Limited (SSCDL)
- 3. Sitilink
- 4. Project Management Consultant (PMC)
- 5. Existing system integrator for AFCS project
- 6. Existing system integrator for ITMS project
- 7. Existing Network Service Provider
- 8. EMS & BI System Integrator (SI)
- 9. Existing System Integrator of the ICCC Project

4.8 Key Beneficiaries

The key beneficiaries of this project include:

- 1. Citizens of Surat
- 2. Surat Municipal Corporation.
- 3. Surat Smart City Development Limited
- 4. Sitilink
- 5. System Integrators for ITMS and AFCS Projects

4.9 Existing infrastructure

Some of the existing Infrastructure/Software which has been already established by Surat Municipal Corporation/Surat Smart City Development Limited which shall be utilized for implementing project by the bidder.

- Smart City Centre (SMAC) and Surat Urban Observatory and Emergency Response Center (ICCC)
- 2. Complete Data Centre with Non-IT and IT Components
- 3. Network Infrastructure
- 4. Existing AFCS project components
- 5. Existing ITMS project components

4.9.1 Smart City Centre (SMAC) and Integrated Command Control Center (ICCC) Surat Urban Observatory and Emergency Response Center (ICCC)

One of the flagship projects implemented under smart city initiatives is the Smart City Center (SMAC Center) & Surat Urban Observatory and Emergency Response Center (ICCC). These center are an administrative command and control Centre to monitor effective delivery of various civic services. These center houses a large video wall and seating space for operators to monitor various services. SI will be required to ensure that the EMS & Business Intelligence software solution is monitored, accessed and controlled from these control centers.

4.9.2 Data Center

Surat Municipal Corporation has its own data center located at Surat Urban Observatory and Emergency Response Center (ICCC) near Breadliner circle. As a part of the project, SMC/SSCDL will provide the necessary rack space along with UPS power to the selected SI at the existing data center to host/deploy the proposed IT infrastructure. However, SI is required to supply, install, test and commission all required IT infrastructure for EMS System and BIS solution.

4.9.3 Network Infrastructure

The network backbone for data communication has already been established by SMC for AFCS project through their designated service provider and existing system integrator. Most of the AFCS components are connected over Fiber/Lease line network through Data Center. However, some of the AFCS components i.e., ETM device, Pole Validator etc., are connected through Data Center over 2G/3G cellular connectivity. The SI will be required to utilize the existing network infrastructure for implementing this project. However, if any bandwidth related bottleneck observed, appropriate bandwidth shall be provisioned by SSCDL/SMC through their designated service provider/existing implementing agency post validation of required bandwidth.

4.9.4 Existing Components of AFCS project

Some of the existing Data Center infrastructure of AFCS project can be utilized for implementing this project. Please refer Annexure-I for the detail of existing AFCS Data center infrastructure which can be utilized for EMS Project.

As mentioned below, some of the existing AFCS Project Application which needs to be integrated with BIS Solution.

#	Application/Website/Mobile App	Technology	Database
1	Surat Sitilink	Node.js	Postgre SQL

4.9.5 Existing components of ITMS project

As mentioned below, some of the existing ITMS Application which needs to be integrated with BIS Solution. Below are the details,

#	Application/Website/Mobile App	Technology	Database
	Automatic Vehicle Locating System (AVLS)	DIID	MCCOI
1	Application URL: https://www.smcitms.in/avls	PHP	MSSQL
	Public Website	NIET	MCCOI
2	Application URL: https://www.suratsitilink.org	.NET	MSSQL
3	Helpdesk Ticketing Tool	Orrigan	MSSQL
	Application URL: https://helpdesk.smcitms.in/	Orion	
4	Planning & Scheduling Software		
	Application: Lumiplan V 8.5	-	_

5 Project Scope

5.1 Broad Scope

The System Integrator (SI) shall have to ensure the successful implementation of the proposed EMS solution for AFCS project and BIS Solution for AFCS and ITMS project as per the scope and functional requirement mentioned in this RFP. From the perspective of project implementation and support, the scope includes but not limited to following broad areas:

1. Implementation Activities

- a. Design, Supply, Installation, Testing and Commissioning of Enterprise Management System solution and Business Intelligence Software Solution as per the scope of this RFP.
- b. Conduct a detailed assessment and develop a comprehensive project plan to implement the EMS and BIS Solution as per the scope of this RFP.
- c. Coordination with End User department for finalization of the scope as a part of feasibility study.
- d. Prepare & obtain relevant sign off on Software/System Requirement Specification (SRS) & Functional Requirement Specification (FRS) from concerned departments for EMS & BIS Solution.
- e. Implement & configure end to end existing Service Level Agreement(SLA) of AFCS project in the proposed EMS Software
- f. Integration and Consolidation of all the Software modules with BIS Solution associated with smart components of Public Transportation (i.e., Intelligent Transit Management System and Automatic Fare Collection System).
- g. Necessary development of APIs for implementation of BIS Solution
- h. Provide Support for System Acceptance Testing
- i. Implement & configure end to end existing Service Level Agreement(SLA) of AFCS project in the proposed EMS Software
- j. Developing Standard Operating Procedures (SOP's)

- k. Preparation of system documents, user manuals, etc.
- 1. Hands on Training on usage on proposed EMS & BI Solution to End User
- m. Deployment of the required Manpower as per section 5.7

2. Post-Implementation Activities

- a. Hands on Training on Operationalization of the EMS and BIS Solution to End User.
- b. Onsite Comprehensive Warranty and O&M support for EMS and BIS solution for 5 years post successful Go-Live
- c. Maintain SLA's as per requirement of the RFP
- d. Deployment of the required Manpower as per section 5.7 to perform the task as per SSCDL/SMC's requirement.

Sr. No	Project Solution	Implementation for Projects
1	Enterprise Management System	AFCS
2	Business Intelligence Software Solution	AFCS and ITMS (Both)

5.2 Implementation activities

Implementation Activities have been further categorized into the different elements of scope as given below:

- 1. SI shall be responsible to assess the existing infrastructure and software solutions established by SSCDL/SMC pertaining to the AFCS and ITMS project and submit assessment report within the time limit from the date of issuance of LoI/Work Order. The report should cover below mentioned aspects.
 - a) Detail Project Plan specifying dependencies between various project activities / subactivities and their timelines
 - b) Project organization structure and escalation matrix.
 - c) Responsibility matrix for all stakeholders.
 - d) Overall Solution Architecture.
 - e) Reusability of existing infrastructure.
 - f) Final Bill of Quantity (BOQ).
 - g) Upgradation of Bandwidth if any required for AFCS and ITMS project components.
 - h) Any other relevant information.

However, if authority suggest any work which is not included in the tender and to be executed as an extra item / excess item, agency has to carry out the work as per tender terms and conditions and SI cannot deny executing the same.

- 2. SI shall have to design their solution after considering the re-usability of existing available infrastructure and software solutions.
- 3. SI shall be responsible for supply, installation, testing and commissioning of end-to-end EMS System for AFCS project components and BI System Solution for AFCS and ITMS project as per functional requirement mentioned in this RFP. Please refer Annexure-I for the list of components implemented under the scope of AFCS project for which EMS Solution shall

- require to be provided. It is to be noted that some of the equipment's under the scope of AFCS project are pending to be installed and hence SI is responsible to add such equipment's and related software in the EMS software as and when required post installation of the same without any additional cost incurred to SSCDL/SMC.
- 4. SI shall be required to propose Enterprise level EMS software solution. The proposed EMS solution should be highly scalable and capable of delivering high performance as and when number of devices increases without compromising the performance.
- 5. SI shall be required to propose Business Intelligence Software Solution. The proposed BI Solution should be highly scalable and capable of delivering high performance as and when number of users increases without compromising the performance.
- 6. SI shall be responsible to customise the proposed EMS system and BI Solution if any required to meet the RFP requirement without any additional cost implication to SSCDL/SMC.
- 7. Supply of workstation and other related accessories shall not be in the scope of SI. However, SI shall be responsible to supply and install other necessary software with required licences i.e., Antivirus Software for server, Operating system, Database software, any others software as required to run this project.
- 8. Although appropriate bandwidth has already been provisioned for AFCS and ITMS project components by SSCDL/SMC and hence provisioning of network connectivity is not in the scope of this project. However, SI shall be responsible to assess the existing available bandwidth for AFCS and ITMS project components implemented across Surat city and intimate in writing if any additional bandwidth required to run the proposed EMS solution and BIS Solution as per RFP requirement with proper justification. SSCDL/SMC shall upgrade the existing bandwidth through their appointed service provider/SI for AFCS and ITMS project as per requirement shared by SI after due validation.
- 9. The IP Pool/ Range/ Class may be different at different locations for AFCS project components and hence SI should design their solution accordingly.
- 10. As part of the project, the SI will be provided the necessary Rack space to host the IT infrastructure required and proposed for EMS and BIS Solution. However, SI is required to supply, install and commission all the required IT infrastructure i.e., Server with necessary internal storage along with system software and application software at the Data Centre for successful operations of the EMS system and BIS Solution. SI has to ensure that redundancy is provided for all the key DC components to ensure that no single point of failure affects the performance of the overall system. The SI as the part of overall solution should consider latest & innovative technologies and propose the most optimal solution.
- 11. SI shall be responsible to take relevant permissions from concerned departments of SMC as and when required to implement the proposed EMS system and BIS Solution.
- 12. All the hardware shall be new and procured for this project. The ownership of hardware shall be transferred to SSCDL/SMC on commissioning of hardware. However, SI shall be fully responsible for maintaining these Assets during the contract period and shall be fully accountable for the same.

- 13. SI shall be responsible to provide support for Partial Acceptance Testing & Final Acceptance Testing of IT & Non-IT Equipment's/software which has been procured under the scope of the EMS system and BIS Solution.
- 14. SI shall be responsible to help the SMC authorities and PMC in necessary paperwork and documents if any required during the contract period.
- 15. Selected bidder is responsible to provide Capacity Building support to SSCDL/SMC which includes:
 - a) Preparation of operational manuals for EMS and BI System and update the same as and when required
 - b) Training of the city authorities and operators on operationalization of the EMS system and BIS Solution
 - c) Support during execution of acceptance testing
 - d) Developing Standard Operating Procedures (SOPs) for operations management of EMS system and BIS Solution.
 - e) Prepare and submit Training material & User manual. The training materials and user manual shall be in bilingual i.e., Gujarati and English.

5.3 Post Implementation Activities

The components procured under this Project shall be with 5 years of onsite comprehensive Warranty or O&M support for EMS Software and BIS Solution. The broad scope of the work during onsite comprehensive Warranty Support are as follows:

- 1. The SI shall require to provide the warranty to Hardware as well as software items forming part of this Project and supplied and installed by the SI for a period of 5 (Five) years from the date of issuance of Project Acceptance/Go Live Certificate (the "Warranty Period"). However, SI shall require to provide comprehensive operation and maintenance (O&M) support to EMS software and BIS Solution for a period of 5 (Five) years from the date of issuance of Project Acceptance/Go-Live certificate (O&M Period). SI to ensure uptime and availability of Project all time during the Warranty and O&M Period as well by resolving any bug and technical problems as soon as possible.
- 2. SI is responsible to maintain all defined Service Level Agreements (SLA) mentioned in this RFP.
- 3. SI shall require to hand-over the system to SSCDL/SMC at the end of the contract period in working condition along with all documentation required to operate and maintain the system.
- 4. Following activities to be carried out by SI during comprehensive Warranty and O&M Support:
 - a. Maintain the Project, modify, repair or otherwise make improvements to the Project to comply with Technical Specifications, Functional Specifications, Service Level Agreements specified in RFP. SI shall be responsible to adhere Good Industry practice, Applicable Laws and manufacturer's guidelines and instructions during warranty and O&M period.
 - b. The SI shall be responsible for ensuring smooth operation of the Project and undertaking routine and periodic maintenance including all periodic software upgrades in order to maintain the Minimum Service Levels specified in RFP.
 - c. SI shall responsible to rectify any defect or failure of Project Components comprising of

- Hardware and Software (including Non-IT/ passive items) due to defective design, material or workmanship, manufacturing or development defects or latent defect or normal wear and tear within the design limit, during the Contract Period.
- d. The rectification, change of spare of hardware and software units, modification and all software upgrades (Major and minor) shall have to be undertaken by the System Integrator to cure the faults/defects/deficiency in order to raise speed, efficiency and/or effectiveness of the sub system and achieve a higher performance level of Project within the Remedial Period specified by the SSCDL/SMC.
- e. In case if breakdown/ maintenance work is required to be carried out during non-working days/ hours, the bidder shall attend the task(s) during this period at no extra cost.
- f. The server and other system software should be regularly patched/updated. Major patching /update which requires system downtime has to be informed well in advance and should be undertaken only after SSCDL/SMC's confirmation.
- g. The SI should either repair the equipment, or replace the equipment with new equipment, to ensure the EMS system and BI Solution is operational. Any equipment is either breakdown, damaged due to the negligence of SI, or any technical reasons, it should be replaced with new equipment or item under the guidance of operational team of the SSCDL/SMC.
- h. In case the quoted item is not available in the market, the SI shall have to supply higher Version/ Replacement of that item with prior approval of SSCDL/SMC at no extra cost of same OEM. No "End of Life" product should be supplied to minimize such instances during OEM support for 5 years. If any spare(s)/ material(s) found defective than same should be repaired or new spare(s)/ material(s) is to be replaced. In any case second hand material is not allowed.
- i. In case if the SI is not able to repair the original equipment or any part of it, the SI shall supply the new substitute of same specifications or of higher specifications, with prior approval of the concern officer in SSCDL/SMC. In case, if it is found that the substituted item is of lower quality/specification then the same must be replaced. In case of, repetitive instances, SSCDL/SMC will take punitive action against the bidder.
- j. The SI should perform all the tasks that need to be taken up to keep the EMS system and BIS Solution in a 24x7 environment. This includes but not limited to any component breakdowns, reworks, re-configure system that need to perform/replace the breakdown components etc., as per SLA.
- k. The SI should also take up the work including reworks, shifting of equipment, reconfiguring the system, optimization or performance of EMS system and BIS Solution, re-installation of software, expansion to the existing system such as adding AFCS components in EMS software etc. as & when needed. SI to ensure above activities without any additional cost to SMC/SSCDL.
- l. Deploy required number of competent technical manpower /engineers/ supervisors along with necessary spare parts, standby items and inventories of all parts of Project during the Contract period at its own cost for evaluation of performance, operation, maintenance and management of the Project and its components in order to maintain the Minimum Service Levels specified in RFP during the Contract period. Necessary technical personnel shall also

- be deputed by the SI at its own cost for investigating defects and failures and carrying out modifications as and when required during the Contract Period.
- m. Resolve any bugs, technical problems with regards to ticketing operation on urgent basis.
- n. To ensure that ticketing operation shall not get impacted owing to technical issues.
- o. Ensure smooth operation of Project during the Contract Period by undertaking routine and periodic maintenance of the Project components and carrying out rectification, modification, software upgrades, change of spare if need so arise in order to maintain the Minimum Service Levels all time during the Contract Period.
- p. Ensure uptime and availability of the Project at all times of Contract Period in relation to the minimum Service Levels specified in this RFP and the scope specified in RFP.
- g. Undertake timely upgradation of Project if need so arise during the Contract Period.
- r. Prepare a Maintenance Manual and other manuals specified in this RFP in consultation with SSCDL/SMC or its PMC specifying the detailed operation plan, methodology and time period of regular and preventive maintenance, comprehensive information of equipment, hardware, software (including Non-IT/ passive items) used in Project, operation procedure of each sub system installed, the repair and maintenance procedures of each component and hardware of the Project, procedures for diagnosis, removal of bugs and replacement of any item of equipment, diagnosis procedures of faults and procedures for removing it and replacing. These manuals shall be detailed as per the RFP requirements.
- s. Design, Development and Provide all MIS report specified in RFP, or any other reports required by SSCDL/SMC under the EMS and BI applications.
- t. Integration of the data from EMS system into the BI to see the collective performance of the all component under the AFCS project.
- u. Take all precautions to ensure that the Project including all software and hardware (including non-IT/ passive items) involved remains safe and secure in general and free from attacks arising from attempted manipulation, fraud, break down, compromising of data security, malware and virus attacks, physical attacks or damage due to neglect or omission.
- v. Ensure that any premises/Project Site provided by SSCDL/SMC to the System Integrator for the purpose of carrying out its obligations shall be used solely for the purpose of carrying out the functions intended and obligations placed under this contract and not for any other purposes.
- w. The SI shall not permit anti-social activities/illegal activities on Project Site during the Contract Period. Any liabilities arise as consequences of such event shall be borne by the SI. On occurrence of such event, the SI shall solely responsible for legal remedies and SSCDL/SMC may consider Termination on occurrence of such event.
- x. Take prompt and reasonable action for redressal of each complaint received from users including complaints received by SSCDL/SMC related to Project.
- y. Obtain and keep valid all applicable Permits/Licenses required by it under applicable laws for carrying out its scope of work during the Contract Period.
- z. The SI shall be required to hand over BIS solution and all the equipment's under the scope of this project in working condition at the time of completion/termination of the Contract,

- otherwise the equipment, found faulty, shall be rectified from any external agency and whole replacement/repair cost will be borne by the SI only.
- aa. SI is not responsible to maintain the existing infrastructure which is being re-utilized for this Project. However, SI is required to inform the SMC/SSCDL if any damage/discrepancies observed during the monitoring. SMC/SSCDL shall get the faulty equipment repaired by their respective Service Provider.
- 5. Warranty Terms shall not be applicable in the event of damages due to Vandalism, tampering of hardware or any of the Project components by Authority's staff or any external party. In such an event, the SSCDL/SMC shall request the SI to repair/replace the damaged component of Project and reinstall the same. Reasonable repair/replacement costs towards the same shall be reimbursed by the SSCDL/SMC to the SI less of insurance proceeds.
- 6. SI will be responsible to take the backup of operating system, database and application as per industry best practices. SI will be responsible to restore the backup in case of failure as and when required.
- 7. SI is responsible for providing required training as mentioned below:
 - a) Training to the staff of SSCDL/SMC or SSCDL's appointed agencies on related operations of the Project including reports generation etc.
 - b) Training on basic troubleshooting of all equipment/infrastructure to SSCDL/SMC officials
 - c) Training sessions should be conducted on a requisite mix of theory & practical operations. The trainings should be conducted in English and Hindi/Gujarati. For practical training, SI is responsible to make provision for necessary equipment's
 - d) SI is responsible for providing user manuals at the time of training. The user manual should also be periodically updated (if necessary) and provided in hard copy as well as in soft copy.
 - e) The training shall be carried out for adequate period as mentioned above for which the detailed training schedule along with the content of the training shall be submitted by the SI.
 - f) SI will have to bear all the cost associated with the conducting such training programs. The space for training shall be provided by SSCDL/SMC.

5.4 Design Considerations and Operating Condition

- 1. **Reliability:** The proposed system must be designed to cater for 24x7 round-the clock operations and services.
- 2. **Maintainability:** The bidder has to maintain the uptime for entire system as mentioned in SLA. This uptime is exclusive of regular maintenance. The minimum downtime for all the components, factors such as ease of replacement, mean-time to-repair (MTTR) has to be incorporated in the system design and proposal.
- 3. **User-Friendly:** The system server shall be Windows, Linux or Unix OS based. At the same time, the administrative and dispatch console should be World Wide Web based, the multichannel S/W client should operate on Windows and Linux based client Operating System. The server system can be based on Windows/Linux/Unix OS.

- 4. **Upgradeability**: Each part of the system produced shall be modular and easily reconfigurable and upgradeable. The system should be preferably based on an open system concept.
- 5. **Security:** Network and Physical Security of the equipment against all the possible threats needs to be taken care of while designing the entire system. The utmost care and due consideration for the security of data is mandatory

The architecture must adopt an end-to-end security model that protects data from malicious attacks, theft, etc. SI must make provisions for protection of the software system from hackers and other threats. The virus and bug attacks should be well defended with gateway level Anti-virus system, Furthermore, all the system logs should be properly stored & archived for future analysis and forensics whenever required. SSCDL/SMC may carry out the Security Audit of the entire system post acceptance/operationalization through a Third-Party Auditor (TPA). The following guidelines need to be observed for security:

- a. Build a complete audit trail of all activities and operations using log reports, so that errors in system intentional or otherwise, can be traced and corrected.
- b. The most appropriate level of security commensurate with the value to that function for which it is deployed must be chosen
- c. Implement data security to allow for changes in technology and business needs.
- 6. **Electromagnetic Compatibility:** The IP Interoperability and Collaboration System shall be able to operate without any complication due to any electromagnetic interference exists in or between sub-systems.
- 7. **At expiry of Contract:** For smooth handing over/transfer of the system, at the time of end of the contract, all the system (Software, Hardware, Components and subcomponents etc. used in the project) shall be fully functional/operational with detailed diagrams and drawings.
- 8. **Scalability:** The system should be designed for scalability and allow future expansions in terms of subsequent project phases, increased user density and geographical coverage.
- 9. Availability Components of the architecture must provide redundancy and ensure that there is no single point of failures in the key project components. Considering the high sensitivity of the system, design should be in such a way as to be resilient to technological sabotage. To take care of remote failure, the systems need to be configured to mask and recover with minimum outage. The SI shall make the provision for high availability for all the services of the system.
- 10. **Convergence** SSCDL/SMC has already initiated many projects which have state of the art infrastructure at field locations deployed under them. The System Integrator shall ensure leveraging the existing infrastructure for optimum utilization, and hence the SI shall submit a re-usability report for all IT and non-IT Infrastructure after signing of contract. Further, the Project Infrastructure should be made scalable for future convergence needs. Under the smart city program, SSCDL/SMC has envisaged to create a state-of-the-art infrastructure and services for the citizens of Surat, hence it is imperative that all infrastructure created under the project shall be leveraged for maximum utilization. Hence the System Integrator is required to ensure that such infrastructure will allow for accommodation of equipment's being procured under other smart city projects. The procedure for utilization of the infrastructure will be mutually agreed between the SSCDL/SMC and System Integrator.

5.5 Acceptance Testing

The SSCDL/SMC shall review and finalize the detailed acceptance test plan proposed by the SI. The SSCDL/SMC would also conduct audit of the process, plan and results of the Acceptance Test carried out by the SI for the components procured under the scope of this project. The SSCDL/SMC would issue certification of completion for which SSCDL/SMC shall verify availability of all the defined services as per the contract signed between the SI and SSCDL. The SI shall be required to demonstrate all the services, features, functionalities as mentioned in the agreement.

All acceptance testing, project review and monitoring shall be enabled through a Project Management Unit (PMU) nominated by SSCDL/SMC prior to certification by SSCDL/SMC.

Commissioning shall involve the completion of the supply, installation and integration of the required components and making the Project available to the SSCDL/SMC for carrying out live Operations and getting the acceptance of the same from the SSCDL/SMC. Testing and Commissioning shall be carried out before the commencement of Operations.

1. Partial Acceptance Test

Partial Acceptance Test shall involve scrutiny of documents for components procured under the scope of this project to verify if the specifications conform to the technical and functional requirements mentioned in the Tender and subsequent corrigendum. SSCDL/SMC reserves right to conduct physical inspection of the equipment delivered to ensure that they arrive at the sites in good condition and are free from physical damage and incomplete shipments and shall return the products to the supplier at the supplier's expenses if the same is not as per RFP requirements. Physical inspection of hardware will also include physical checking and counting of the delivered equipment in presence of the Successful SI. This equipment will only be acceptable as correct when each received item corresponds with the checklist that will be prepared by the Successful SI prior to shipment. Any shortfalls in terms of number of items received may render the delivered equipment incomplete.

2. Final Acceptance Testing

The final acceptance shall cover 100% of the "Project", after successful testing by the SSCDL/SMC or its PMU; a Final Acceptance Test Certificate (FAT) shall be issued by the SSCDL to the SI.

Prerequisite for Carrying out FAT activity:

- a. Detailed test plan for EMS & BI shall be developed by the SI and approved by SSCDL/SMC. This shall be submitted by SI before FAT activity to be carried out.
- b. All documentation related to Project and relevant acceptance test document should be completed & submitted before the final acceptance test to the SSCDL.
- c. The training requirements as mentioned should be completed before the final acceptance test.
- d. Successful hosting of Software applications.
- e. For both IT & Non-IT equipment's / software manuals / brochures / Data Sheets / CD / DVD / media for all the Project supplied components.

The FAT shall include the following:

a. All hardware and software items must be installed and configured at respective sites as per the specification.

- b. Availability of all the defined services shall be verified.
- c. The SI shall be required to demonstrate all the features / facilities / functionalities as mentioned in the RFP.
- d. Successful integration of existing ITMS & AFCS Project application with BI Software for MIS reports.
- e. Successful extraction of downtime/SLA report from EMS Solution for AFCS Project as per SLA mentioned for AFCS Project
- f. Addition of all the devices in the EMS tool for SLA management purpose.
- g. The configuration of all SLA defined in the AFCS project.
- h. The SI shall arrange all tools/equipment's required to carry out successful FAT and will also provide documented test results for the same.

Any delay by the SI in the Final Acceptance Testing shall result in imposition of appropriate penalties. However, delays identified beyond the control of SI shall be considered appropriately and as per mutual agreement between SSCDL and SI. In the event the SI is not able to complete the installation due to non-availability of bandwidth from the bandwidth service providers, the Supplier and SSCDL may mutually agree to redefine the Network so the SI can complete installation and conduct the Final Acceptance Test within the specified time.

5.6 Audit Observations and Compliance

SMC/SSCDL is subjected to various audits (internal / external). In the event of any observation by the audit team the same will be intimated to the SI. The SI is required to assist the SMC/SSCDL for compliance of the same.

5.7 Resource Requirement

The SI is expected to maintain an onsite team of experts for the duration of the contract. The details of resources required during the contract period are provided below.

1. During Implementation Phase of the Project - Implementation Team

SI shall provide the details of implementation team (During the kick off meeting/staring of implementation period) which would consist of the key personnel supported by the other team members during the implementation phase of the project. SI to submit the CV of the key Manpower proposed for review of SSCDL. Project Manager will represent the views of SI in all review meetings to assist the client on the matters related to the project & he/she will be the SPOC for the project during the implementation phase. Minimum resource requirements for core team is mentioned in below table, which should have the same qualification as proposed by the bidder on its technical proposal or as per the qualification / experience criteria specified in the RFP, whichever is higher:

#	Minimum Qualifications	Type of Deployment
1	Project Manager	Full Time for Implementation at Client Site
	Minimum Education: BE/BTech + MBA	

#	Minimum Qualifications	Type of
	Total Experience: At least 10 years in IT/ICT sector with minimum 5 years of experience in IT Infrastructure/Network Domain based domain & experience in implementation of minimum 1 assignment on Data Centre Implementation in India. Certificate: PMP/Prince2 Required Skills: Project Management Client Management Documentation Specific Domain knowledge of the Data Centre IT Hardware and Software.	Deployment
2	Technical Expert for Business Intelligence Software Solution	Full Time for Implementation at Client Site
	Minimum Education: BE /B. Tech (EC/CS/IT) Total Experience: At least 5 years in implementation and operations of BI Software Solution in Integrated Transit Management Project/Transport Domain Project. Certificate: TOGAF Required Skills:	
3	Technical Expert for EMS Software Solution	Full Time for Implementation at Client Site
	Minimum Education: BE /B. Tech (EC/CS/IT) Total Experience: At least 5 years in implementation and operations of EMS System. Certificate: CCNA Required Skills: • EMS System Installation and Configuration • Operation & Maintenance of EMS System • MIS Reports • Network Monitoring System	

Note: The above mentioned are the minimum indicative list of type and quality of resources required. However, the bidder is free to put additional manpower wherever required in the implementation phase to comply the implementation timelines as per the RFP/contract agreement with no additional cost to the user department.

2. During Operation and Maintenance Phase - Operation & Maintenance Team

SI shall provide the details of support team during O&M phase of the project. The O&M team is required to support all the additional requirements of customization/configuration of the system as per the future requirements of the client. SI to submit the CV of the key Manpower proposed for review of SSCDL prior to O&M Phase commencement. Project Manager will represent the views of SI in all review meetings to assist the client on the project related matters. The tentative resource requirement for team is mentioned in below table and client may direct the SI to deploy additional resources on agreed terms at any time during the contract. SI shall deploy these resources full time onsite.

#	Minimum Qualifications	Type of Deployment
		1 st Year Post Go- Live (Full Time)
1	Project Manager	2 nd Year to 5 th Year Post Go Live (On Need Basis)
	Minimum Education: BE/BTech + MBA	
	Total Experience: At least 10 years in IT/ICT sector with minimum 5 years of experience in IT Infrastructure/Network Domain based domain & experience in implementation of minimum 1 assignment on Data Centre Implementation in India.	
	Certificate: PMP/Prince2	
	Required Skills:	
	 Project Management Client Management Documentation Specific Domain knowledge of the Data Centre IT Hardware and Software. 	
0	Technical Expert for Business Intelligence Software	Full Time on client
2	Solution	site
	Minimum Education: BE /B. Tech (CS or IT)/ MCA	
	Total Experience: At least 5 years in implementation and operations of BI Software Solution in Integrated Transit Management Project/Transport Domain Project.	
	Required Skills:	
	 Data Analysis & Visualization Report Development & Data Visualization Software Programming Knowledge Statistical Analysis 	

#	Minimum Qualifications	Type of Deployment
	MIS Reporting	
	Integration	
	Database Management System	
0	Helpdesk Staff for EMS Software Solution	Full Time on client
3		site
	Minimum Education: BE /B. Tech/BCA (EC/CS/IT)	
	Total Experience: At least 2 years of experience as a Helpdesk	
	Support Staff.	
	Required Skills:	
	Technical Assistant	
	Ticket Log	
	Coordination with Field Team of AFCS Project	
	Extraction of the SLA reports from EMS application	
	Implementation of the SLA policies as required	

Note: The above mentioned are the minimum indicative list of type and quality of resources required. However, the bidder is free to put additional manpower wherever required in the implementation phase to comply the implementation timelines as per the RFP/contract agreement with no additional cost to the user department.

The SI is required to provide suitable manpower at Command Centre and support SMC/SSCDL in operationalisation of the EMS and BIS Solution project. The exact role of these personnel and their responsibilities would be defined and monitored by SMC. System Integrator shall be required to provide such manpower meeting following requirements:

- 1. All such manpower shall be without any criminal background/record.
- 2. SMC reserves the right to carry out background check of the personnel proposed on the Project for verification of criminal record, at the beginning of deployment or during deployment.
- 3. System Integrator shall have to replace any person, if not found suitable for the job.

5.8 General Guidelines Regarding Project Compliance

- The specifications/functionality mentioned for various IT /Software components (whose costs have been considered) are minimum indicative requirements and should be treated for benchmarking purpose only. SIs are required to undertake their own requirement analysis and may propose appropriate specifications/functionality over and above meeting specified minimum technical specifications/parameters/functionality in the bid that are better suited to the requirements.
- 2. All the hardware and software supplied should be from the reputed Original Equipment Manufacturers (OEMs). SSCDL reserves the right to ask replacement of any hardware / software without any additional cost to SSCDL, if it is not conforming to all requirements specified in tender documents.

- 3. Any manufacturer and product name mentioned in the Tender should not be treated as a recommendation of the manufacturer / product.
- 4. None of the IT / Non-IT equipment's proposed by the SI should be End of Life and End of Sale/Order product. It is essential that the technical proposal is accompanied by the OEM certificate in the format given in this Tender, where-in the OEM will certify that the product is not end of life product & shall support for at least 6 years from the date of Bid Submission.
- 5. In case of addition/update in number of licenses for the EMS software, the SI is required to meet the technical specifications enlisted and for the upward revisions and/or additions of licenses, it is required to be made as part of change order and cost would be commensurate to the itemized rate approved at the LOI issuance.
- 6. The system software licenses of EMS & BI (including COTS products) shall be genuine, **perpetual**, full use and should provide patches, fixes, security updates directly from the OEM at no additional cost to SSCDL for the entire period of contract. License to be procured in the name of Surat Municipal Corporation.
- 7. Business Intelligence software should not have limitation for generation of MIS reports & dashboard. BI Application shall have capability to generate all types of the reports with the available data in near real-time as well as back-up data.
- 8. The Service provider must have to provide authority a GRAPHICAL DASHBOARD to have visual view of all / some key reports/ parameters enabling quick decision making.
- 9. All IT Components should support IPv4 and IPv6
- 10. Technical Bid should be accompanied by OEM's product brochure / datasheet. SIs should provide complete make, model, part numbers and sub-part numbers for all equipment/software quoted, in the Technical Bid.
- 11. SI shall ensure that only one make and model is proposed for one-line item in Technical & Financial Bid. Bidders are not allowed to quote multiple makes & models against one-line item. Further, Selected bidder is not allowed to change the quoted OEM's during the contract tenure.
- 12. SI should ensure complete warranty and support for all equipment from OEMs. All the back-to-back service agreements should be submitted during the project implementation.
- 13. The SI shall be responsible to perform relevant end to end security audits on the entire EMS & BI project, before SMC/SSCDL can approve final go live. These security audits shall be performed for all critical project components like information, software, hardware, network, infrastructure, integration, and app. SI shall engage an independent third-party auditor that is Cert-In empanelled or STQC security auditor to carry out this audit. SI is required to share the complete details of the audit logs along with copies of all communication, written or otherwise, issues list, bug report, etc. Upon successful completion of the security audit, SI is required to submit Audit Completion Certificate to SSCDL along with the validity period of this security audit. SSCDL shall review this certificate and make final decisions around go-live. SSCDL also reserves the right to carry out independent third-party audit.
- 14. The user interface of the system should be a user friendly Graphical User Interface (GUI).
- 15. Critical core components of the system should not have any requirements to have proprietary platforms and should conform to open standards.

- 16. For custom made modules, industry standards and norms should be adhered to for coding during application development to make debugging and maintenance easier. Object oriented programming methodology must be followed to facilitate sharing, componentizing and multiple-use of standard code. Before hosting the application, it shall be subjected to application security audit (by any of the CERTIN empanelled vendors) to ensure that the application is free from any vulnerability.
- 17. All the Clients Machines / Servers shall support static assigned IP addresses or shall obtain IP addresses from a DNS/DHCP server
- 18. The Servers provided should meet industry standard performance parameters (such as CPU Utilisation of 60 percent or less, disk utilisation of 75 percent or less). In case any non-standard computing environment is proposed (such as cloud), detail clarification needs to be provided in form of supporting documents, to confirm (a) how the sizing has been arrived at and (b) how SLAs would be met.
- 19. SI is required to ensure that there is no choking point / bottleneck anywhere in the system (end-to-end) and enforce performance and adherence to SLAs. SLA reports must be submitted as specified in the Bid without fail.
- 20. All proposed Active Network and Network Management Solutions should be Enterprise Grade.
- 21. IPR of all the hardware, software, licenses etc. COTS or Bespoke application developed for this project shall be in the name of Surat Municipal Corporation.
- 22. The software licenses should not be restricted based on location and the Purchaser should have the flexibility to use the software licenses for other requirements within Surat City range if required
- 23. Purchaser may ask to selected bidder to continue the Operation & Maintenance for the 6th & 7th year basis mutually agreed terms and conditions.
- 24. All the equipment, software and workmanship that form a part of the service are to be under warranty throughout the term of the service contract from the date of service acceptance and commencement. The warranty shall require the SI to be responsible to bear all cost of parts, Labor, field service, pick-up and delivery related to repairs, corrections during the Project Period or all such incidental expenses incurred during the warranty period.
- 25. SI will have to provide troubleshooting & FAQ's, Content Development Guide, Content Sharing Guide, Software Guide etc.
- 26. SI has to comply the compliance of the data privacy act implemented or to be implemented by Government of India for this Project data. And if in case data privacy breaches at any stage than SI has to highlight the same to the SSCDL for further actions on immediate basis.
- 27. In the consortium agreement, roles & responsibilities (Including but not limited to Scope) of each member (Lead bidder & Consortium member) should be clearly defined. While at the time of the signing of the contract bidder has to submit the detailed break up for CAPEX & OPEX portion of respective members. In case of any dispute arising between consortium member (Lead bidder & Consortium member) and the SSCDL/SMC feels that the dispute is unresolved for the three month then the SSCDL/SMC may take decision to segregate/redistribute the scope of work and will pay them respectively or SSCDL/SMC may instruct One of the member from the consortium to do remaining work and will pay accordingly.

- 28. SI shall perform manual and automated testing including unit, system, network, connectivity, load and performance testing of each components/system before they are deployed. SSCDL/Sitilink/End User then perform User Acceptance Testing (UAT) of each of the deployed hardware/software components. Once all the hardware/software functionalities are successfully tested and deployed, SI shall perform end-to-end integration testing of the entire system and supporting business functionalities based on real world use cases. Finally, Business, Functional, and Technical users from SSCDL/Sitilink/End User shall perform end-to-end User Acceptance Testing (UAT) of the entire system functionality, its performance and provide appropriate sign offs for Go-Live.
- 29. All equipment, parts should be original.
- 30. System Integrator should have a governance structure in place to report to SSCDL/SMC's team on daily, weekly and monthly basis and the solution should allow downloading of standard and custom reports on the monitoring status in various formats like PDF, Excel etc.
- 31. The System Integrator has to prepare and submit a delivery report including details of components supplied. The delivery report will be validated by the identified SSCDL/SMC authorized person.
- 32. All components of the IT Infrastructure should be based on standards to avoid compatibility issues.
- 33. SMC/SSCDL reserves the right to ask the bidder to supply only part of the hardware and software quoted and procure the rest of it separately by itself. The payments schedule will be adjusted accordingly. The Bill of Quantity mentioned in this RFP is indicative and may vary at the time of implementation. The bidder is required to propose the same during project inception report.
- 34. SI is responsible to size and propose the IT infrastructure required for smooth functioning of the entire solution as per OEM guidelines and standard industry practice.
- 35. SMC/SSCDL is not responsible for any assumptions or judgments made by the SI for arriving at any type of sizing or costing. SMC/SSCDL at all times will benchmark the performance of the SI to the RFP Documents circulated to the SI and the expected service levels as mentioned in these documents. In the event of any deviations from the requirements of these documents, the SI must make relevant documents at no additional cost to SMC/SSCDL within two weeks of detection of the deviation, in order to achieve the desired service levels as well as meeting the requirements of these documents. SMC/SSCDL shall not be responsible for any assumptions made by the Bidder. Also, if bidder misses to factor the cost of any item required to deliver the solution successfully or undersize the solution, then the bidder has to provide that without any additional cost.
- 36. All the patches have to run successfully on Test & Development (T&D) environment before deployed Live for production. Bidder has to ensure that the patches provided are compatible with the customized solution running at SSCDL/SMC and will not have any adverse impact on the existing functionalities.
- 37. The Bill of Quantity (BOQ) as estimated by SSCDL/SMC is not exhaustive. Any additional items/ components like Hardware, Software, any licenses, accessories, service etc. as required to make the project completely operational may be assessed by the SI and the same may be incorporated in the offer. Even at the time of execution, if any additional items/ components

- like Hardware, Software, any licenses, accessories, service etc. are required to complete the system integration, notwithstanding the BOQ as identified by the SI as above, the same shall be provided at no additional cost.
- 38. The System Integrator shall be responsible for end-to-end implementation and shall quote and provide/supply any items not included in the bill of material but required for commissioning of the application and meet the requirements of the RFP/Contract. SSCDL/SMC shall not pay for any of the equipment not quoted in the bid but are required for successful completion of the project. However, the same has to be supplied by the System Integrator without any additional fees.
- 39. Kindly note that during integration with proposed Business Intelligence software, if row data format conversion(i.e., HEX to Decimal, etc.) is required in the existing ITMS & AFCS software's data then this project's system integrator has to do the necessary format conversion without any additional financial implication.
- 40. if from existing data's of ITMS & AFCS software's format conversion is required
- 41. The bidder shall propose hardware such that at any point in time during the contract period, the resource utilization does not go beyond the levels defined below
 - (a) The average CPU utilization should not exceed 70% for more than 15 minutes in a single stretch
 - (b) The average memory utilization should not exceed 70% for more than 15 minutes in a single stretch
 - (c) In case of breach of above, the bidder will be required to optimize the solution else the additional hardware has to be provided by the successful bidder to ensure the performance within the indicated levels, at no further cost.

6 Functional Requirements – EMS solution

Enterprise Management Solution should provide end-to-end, comprehensive, modular and integrated management of IT infrastructure components to maximize the availability of IT services and SLA performance. The management system needs to aggregate events and performance information from the domain managers and tie them to service definitions.

The proposed tools should automatically document problems and interruptions for various IT services offered and integrate with the service level management system for reporting on service level agreements (SLAs). The proposed solution must be unified and generate a comprehensive view of a service with real-time visibility into service status and identify the root cause of various infrastructure problems as well as prioritize resources based on impact. The proposed EMS solution must consist of the following core modules:

1. Network Fault Management System

- a. Network Discovery and Reporting
- b. Fault Analysis
- c. Configuration Management
- d. Advance IP Services Management
- e. Service Level Management
- f. Integration management with other modules

2. Performance Management System

- a. Network Performance Monitoring and Performance reporting system
- b. Server Performance Monitoring
- c. Database Performance Monitoring

3. Application Performance Management System

- a. Application Performance Monitoring System
- b. End-user Experience Monitoring System

4. Integrated Helpdesk Management System

5. Security Management System

a. Log Record Collection and Management System

6.1 Network Fault Management System

This provides fault and performance management of the network infrastructure that various services operate in. It provides Network Discovery & Reporting, Fault Analysis, Configuration Management, Advance IP Services Management, Service Management and Integrations with other modules. The proposed System will provide the following features:

- 1. The Network Fault Management consoles must provide the topology map view from a single central console.
- 2. The proposed Network Fault Management console must also provide network asset inventory reports and SLA reporting for the managed network infrastructure.
- 3. The system should allow to install at least 4 to 5 modules on a single server to save on operational cost.
- 4. The operations console and associated management system should be deployable in a separate physical web-server to reduce the load on the primary management server.

- The system needs to support concurrent multi-user access to the management system, enabling multiple read-write access to different areas of the management domain and support operator workflows.
- 6. The security must be able to permit or restrict operator access to different areas of information based on user security rights assigned by the administrator.

6.1.1 Network Discovery and Reporting

- 1. The proposed solution must automatically discover manageable elements connected to the network and map the connectivity between them.
- 2. The system should provide discovery & inventory of heterogeneous physical network devices like Layer-2 & Layer-3 switches, Routers and other IP devices and do mapping of
- 3. LAN & WAN connectivity with granular visibility up to individual ports level.
- 4. The proposed system must support multiple types of discovery including the following:
 - a. IP range discovery including built-in support for IPv6
 - b. Import data from pre-formatted files (IPs, ranges, strings or ports)
 - c. Host Name discovery
 - d. Service based discovery including ping, FTP, JDBC, HTTP etc.
- 5. The system must be able to support mapping and modelling of the infrastructure grouped by network connectivity, physical location of equipment and user groups or departments.
- 6. The modelling of network connectivity must be performed using standard or vendor-specific discovery protocols to ensure speed and accuracy of the network discovery. The system must provide visualization tools to display network topology and device to device connectivity. The system must also be able to document connectivity changes that were discovered since the last update.
- 7. The system should support maps grouped by network topology, geographic locations of the equipment and user group/departments. These should help in understanding physical Network, virtual Network services and the relationships between them.
- 8. It shall be possible to reduce the set of displayed devices in the topology views by flexible rules, based on the attribute contents stored with each device.
- 9. The proposed solution must poll all the ports to determine if any traffic has passed through it. If not, the port must be marked unused for that day
- 10. The system must provide a user-configurable event to alarm mapping system that sets a differentiation that events do not necessarily need an alarm to be generated.
- 11. The proposed solution must provide a detailed asset report, organized by vendor name and device, listing all ports for all devices. When a report is run the administrator must have an option of specifying the number of consecutive days the port must be "unused" in order for it to be considered "available".
- 12. The proposed solution must provide sufficient reports that identify unused ports in the managed network infrastructure that can be reclaimed and reallocated. The proposed management system must also intelligently determine which ports are operationally dormant.

6.1.2 Fault Analysis

1. The proposed system must include the ability to monitor and visualize a virtualized system infrastructure by discovering and monitoring virtual machines and providing ability to depict the logical relationships between virtual servers and virtual machines.

- 2. The proposed solution should provide out of the box root cause analysis with multiple root cause algorithms inbuilt for root cause analysis. It should also have a strong event correlation engine which can correlate the events on the basis of event pairing, event sequencing etc.
- 3. The system should support creating and monitoring of rising or falling thresholds with respect to basic key performance indicators for network, system and application infrastructures and provide immediate notification when service metrics fall outside the baselines.
- 4. The proposed system must include the ability to monitor and visualize a virtualized system infrastructure by discovering and monitoring virtual machines and providing ability to depict the logical relationships between virtual servers and virtual machines.
- 5. The proposed solution must detect virtual server and virtual machine configuration
- 6. Changes and automatically update the topology.
- 7. The proposed system must support enhanced fault isolation to suppress alarms on logical VMs.
- 8. The proposed solution must have the ability to collect data from the virtual systems without solely relying on SNMP.
- 9. The proposed solution must support an architecture that can be extended to support multiple virtualization platforms and technologies.
- 10. The proposed solution must support WMI for collecting and isolating Windows host issues.
- 11. The proposed solution must support SSH polling method to collect and isolate Linux host issues.

6.1.3 Configuration Management

- 1. The system should be able to clearly identify configuration changes as root cause of network problems.
- 2. The system should support secure device configuration capture and upload and thereby detect inconsistent "running" and "startup" configurations and alert the administrators.
- 3. The proposed solution must be able to perform real-time or scheduled capture of device configurations.
- 4. The proposed system should be able to administer configuration changes to network elements by providing toolkits to automate the following administrative tasks of effecting configuration changes to network elements:
 - a. Capture running configuration
 - b. Capture start-up configuration
 - c. Upload configuration
 - d. Compare configuration
- 5. The proposed system should be able to monitor compliance & enforce change control policies within the diverse infrastructure by providing data & tools to run compliance reports, track & remediate violations, and view history of changes.
- 6. The proposed solution must be able to store historical device configurations captured in the database and thereby enable comparison of current device configuration against a previously captured configuration as well as compare the current configuration against any user-defined standard baseline configuration policy.

6.1.4 Advanced IP Services Management

1. The proposed solution should be able to monitor MPLS – VPNs by automating the provider connection resolution and monitoring the service health with an option to auto-provision service assurance tests to proactively calculate the availability of remote sites

- 2. The proposed solution should be capable of managing the VPN Service including a complete Service Discovery of all the Devices and components that support each VPN. The solution must be able to automatically configure and provision site-to-site VRF Ping tests on each router that support VPNs to verify the ability to ping each other.
- 3. The proposed solution should be able to support response time agents to perform network performance tests to help identify network performance bottlenecks.
- 4. The proposed solution should be able to monitor QoS parameters configured to provide traffic classification and prioritization for reliable traffic transport.
- 5. The proposed solution should provide the ability to discover, map & monitor multicast sources & participating routers wherein the system should be able to visualize the distribution tree in the topology map.

6.1.5 Service Level Management

The entire operations would be run in a services model, with several parts of the operations contracted to various agencies/ vendors (including a number of bus operators who will run buses on various routes, IT service providers and numerous other vendors). Service Level Management for each of these service vendors and the associated contracts with each of them will be a challenge.

In such a scenario it is necessary to automate, activate and accelerate the management, monitoring and reporting of Service Level Agreements (SLAs) and service delivery. Provisions should be made for a Service Level Management (SLM) tool that takes a top-down approach – starting from business relevant service descriptions and measurement, define service metrics, establish contractual obligations and performance targets in real-time, take action based on this performance, and collaboratively report performance to both service provider and service consumer. The proposed System will provide the following features:

- 1. The proposed service management system should provide a detailed service dashboard view.
- 2. The proposed Service Dashboard should provide a high-level view for executives and other users of the system. The system should provide an outage summary that gives a high-level health indication for each service as well as the details and root cause of any outage.
- 3. The system must breakdown SLA by the hour and should allow to drill down on each hour to report violations.
- 4. The system must be capable of managing IT resources in terms of the business services they support, specify monitor service obligations, associate and and users/Departments/Organizations with the services thev relv on and related Service/Operational Level Agreements.
- 5. The Users definition facility must support defining person(s) or organization(s) that uses the business Services or is a party to a service level agreement contract with a service provider or both. The facility must enable the association of Users with Services and SLAs.
- 6. Root cause analysis of infrastructure alarms must be applied to the managed Business Services in determining service outages.
- 7. The Service Level Agreements (SLAs) definition facility must support defining a set of one or more service Guarantees that specify the Service obligations stipulated in an SLA contract for a particular time period (weekly, monthly, and so on). Guarantees supported must include one that monitors service availability (including Mean Time to Repair (MTTR), Mean Time between Failure (MTBF), and Maximum Outage Time thresholds) and the other that monitors service transaction response time.

- 8. The system must provide the capability of Advanced Correlation for determining Service health, performing root cause analysis, and fault isolation. This must include applying complex Boolean logic on multiple attributes and infrastructure alarms.
- 9. SLA violation alarms must be generated to notify whenever an agreement is violated or is in danger of being violated.
- 10. The system must provide a real time business services Dashboard that will allow the viewing of the current health of required services inclusive of real-time graphical reports.
- 11. The system must provide the capability to designate planned maintenance periods for services and take into consideration maintenance periods defined at the IT resources level. In addition, the capability to exempt any service outage from impacting an SLA must be available.

6.1.6 Integrations Management

- 1. The proposed system should provide unified workflow between the fault and performance management systems including bi-directional and context-sensitive report generation.
- 2. The proposed system should integrate with the performance management system using a synchronized discovery and single sign-on for operators / administrators between them to enable unified Administration and ease of workflow.
- 3. The proposed system should integrate with the helpdesk system by updating the Asset with information to support viewing history or open issues in helpdesk on the particular managed asset and associate an SLA to the ticket in the helpdesk.
- 4. The proposed system should allow to attach/describe an asset identifier when submitting a helpdesk ticket.
- 5. The system must support seamless bi-directional integration to helpdesk or trouble ticketing system.

6.2 Performance Management:

This provides a comprehensive end-to-end performance management across key parts of the IT infrastructure. It allows identifying trends in performance in order to avert possible service problems and consists of Network Performance Monitoring, Network Traffic Analysis, Server performance monitoring and Database performance monitoring. The proposed System will provide the following features:

- This provides a comprehensive end-to-end performance management across key parts of the network infrastructure. It should allow identifying trends in performance in order to avert possible service problems.
- 2. The proposed performance management system shall integrate network, server and database performance information and alarms in a single console and provide a unified reporting interface for network components. The current performance state of the entire network & system infrastructure shall be visible in an integrated console.
- 3. The proposed solution must scale to large networks while supporting a single web interface for access to reports. The system must support multiple locations and a distributed deployment for collection and monitoring. Primary instrumentation should exist in the data centre.
- 4. Provide SNMP device management of the network and server infrastructure.
- 5. Provide flow-based reporting for network troubleshooting and capacity management.
- 6. Provide Server Performance Monitoring as described.
- 7. Provide Database Performance Monitoring.

- 8. Provide Application Transaction Deep-Dive Monitoring for Web-Based Business Applications.
- 9. Provide End-User Response Time Monitoring for Browser-Based Applications.

6.2.1 Network Performance Monitoring and Performance Reporting System:

The Network Performance Management consoles provides a consistent report generation interface from a single central console. This central console also provides all the required network performance reports (including latency, threshold violations, packet errors, availability, bandwidth utilization etc.) for the network infrastructure. The proposed System will provide the following features:

- 1. The proposed system shall collect, analyse and summarize management data from LAN/WAN, MIB-II interfaces and various servers for performance management.
- 2. The Network Performance Management consoles must provide a consistent report generation interface from a single central console.
- This central console will also provide all required network performance reports (including latency, threshold violations, packet errors, availability, bandwidth utilization etc.) for the network infrastructure.
- 4. It shall provide comprehensive health reporting to identify infrastructure in need of upgrades and immediate attention. Capacity planning reports shall identify network traffic patterns and areas of high resource utilization, enabling to make informed decisions about where to upgrade capacity and where to downgrade or eliminate capacity. It should also support 'What if' analysis and reporting to enable understanding the effect of growth on available network resources.
- 5. The proposed system shall identify over-and under-utilized links and assist in maximizing the utilization of current resources
- 6. The proposed system shall provide Performance of Network devices like CPU, memory & buffers etc., LAN and WAN interfaces and network segments.
- 7. The proposed system shall provide easy to read representations of health, utilization, latency and availability.
- 8. It shall provide Real time network monitoring and Measurement of end-to-end Network performance & availability to define service levels and further improve upon them.
- 9. The proposed system should provide a real-time performance view for all the managed systems and networks along with the various threshold violations alarms in them. It should be possible to drill-down into the performance view to execute context specific reports.
- 10. The proposed system must have a report authoring capability built-in which will enable complete customization flexibility of performance reports for network devices and monitored servers.
- 11. The tool should have the capability to configure different polling speeds for different devices in the managed infrastructure with capability to poll critical devices using 30 second poll periods.
- 12. The system must provide the following reports as part of the base performance monitoring product out-of-the-box to help network operators quickly identify device problems:
 - a. Trend Reports to present a single graph of a single variable (e.g. CPU utilization) for
 - b. Multiple devices across time. This would help network operators & IT managers plan for capacity and identify long drawn problems.
 - c. Top N Reports to present a list of elements that exceed / fall below a particular threshold value. This would help network operators to identify elements that share specific performance characteristics (for example, to identify over utilized elements, you would

- run a Top-N report for all elements whose bandwidth utilization exceeds 90% or availability falls below 95%).
- d. Executive Summary Report that gives an overall view of a group of elements, showing volume and other important metrics for the technology being viewed.
- e. What-if Reports to perform capacity planning by observing the effect of changes in capacity & demand (for example, the report should indicate what the bandwidth utilization would be if the demand was double the historical value).
- f. Service Level Reports to analyse & display service level information for an enterprise, region, department or business process. This report must show the elements with the worst availability and worst response time-the two leading metrics used to monitor SLAs.
- g. Capacity Planning Report which provides a view of under-and-over-utilized elements.
- h. Health Reports to analyse trends calculate averages and evaluate the health of the infrastructure. With this information, operators should be able to determine how efficiently applications and systems are running, whether critical resources are available, and what capacity planning initiatives would make sense.
- 13. The system must provide capability to measure & generate detailed performance reports for the following common TCP/IP applications:
 - a. DHCP: Measure the round trip latency required to obtain an IP address.
 - b. DNS: Measure the DNS lookup time including Latency and Packet Loss.
 - c. FTP: Measure the time it takes to connect and transfer a file including Latency and Packet Loss.
 - d. ICMP Ping: Measure round trip source to destination including Latency and Packet Loss.
 - e. Latency and Packet Loss for:
 - i. POP3
 - ii. SMTP
 - iii. TCP
 - iv. UDP Echo Test
- 14. The proposed system should use intelligent alarm de-duplication and automatic baselining capability to learn the behaviour of the managed infrastructure components over a period of time.
- 15. The tool should provide Latency (both one way and round trip times) report for critical devices and links.
- 16. The proposed system should be able to auto-calculate resource utilization baselines for the entire managed systems and networks and allow user to set corresponding upper and lower threshold limits.

6.2.2 Server Performance Monitoring:

This integrates network performance management systems and give the unified performance state view in a single console. The performance state of the entire network and server infrastructure is visible in an integrated console. The proposed System will provide the following features:

1. The proposed tool should be able to monitor various operating system parameters such as processors, memory, files, processes, file systems, etc. where applicable, using agents on the servers to be monitored.

- 2. The proposed tool should be able to gather information about resources over a period of time and provide historical performance and usage information through graphical reports, which will quickly show performance trends.
- 3. The proposed server performance management system shall integrate network performance management systems and provide the unified performance state view in a single console.
- 4. The current performance state of the entire network and server infrastructure shall be visible in an integrated console.
- 5. The proposed tool must provide lightweight server agents to ensure availability and performance for target server nodes and deliver scalable, real-time management of critical systems.
- 6. The proposed tool should integrate with network performance management system and support operating system monitoring for various platforms including Windows, UNIX and Linux.
- 7. It should also be able to monitor various operating system parameters depending on the operating system being monitored yet offer a similar interface for viewing the agents and setting thresholds.
- 8. It should be possible to configure the operating system monitoring agents to monitor based on user-defined thresholds for warning/critical states and escalate events to event console of enterprise management system.
- 9. The proposed solution should support management following parameters:
 - a. **Processors:** Each processor in the system should be monitored for CPU utilization. It should compare Current utilization against user specified warning and critical thresholds.
 - b. **File Systems:** Each file system should be monitored for the amount of file system space used, which should be compared to user-defined warning and critical thresholds.
 - c. **Log Files:** Logs should be monitored to detect faults in the operating system, the communication subsystem, and in applications. System agents should also analyse log files residing on the host for specified string patterns.
 - d. **System Processes:** System agents should provide real-time collection of data from all system processes. Using this it should help identify whether or not an important process has stopped unexpectedly. It should provide an ability to automatically restart Critical processes.
 - e. **Memory:** System agents should monitor memory utilization and available swap space and should raise an alarm in event of threshold violation.

6.2.3 Database Performance Monitoring:

This integrates network and server performance management systems and provides the unified view of the performance state in a single console. It automates monitoring, data collection and analysis of performance from single point. The proposed System will provide the following features:

- 1. Database performance management solution for Distributed RDBMS must include hundreds of predefined scans for monitoring various database, operating system and network resources. This should minimize the need to write and maintain custom scripts. If a special monitoring situation exists, you can modify an existing script to meet your requirements.
- 2. It should be able to automate monitoring, data collection and analysis of performance from single point.

- 3. The proposed database performance management system shall integrate network and server performance management systems and provide the unified view of the performance state in a single console.
- 4. It should also provide the ability to set thresholds and send notifications when an event occurs, enabling database administrators (DBAs) to quickly trace and resolve performance-related bottlenecks.
- 5. The event management system must send alerts for an array of server conditions, including inadequate free space, runaway processes, high CPU utilization and inadequate swap space.
- 6. The database performance management solution must have a console to enable users to monitor, analyse and take corrective action from a centralized point. It should also include a platform-independent, browser-based console to monitor performance from remote locations.
- 7. The database performance management solution must support historical archive store for performance information in a compressed time-series form. DBAs should be able to drill down through layers of data to discover the cause of a condition occurring with the databases, operating system or network. These historical reports must also be usable to perform trend analysis and capacity planning.

6.3 Application Performance Monitoring

This provides a comprehensive end-to-end performance management for applications. It allows identifying trends in performance in order to avert possible service problems and consists of Application Performance monitoring and End-User experience management.

6.3.1 Application Performance Monitoring System:

This determines if the root cause of the performance issues is inside the monitored application, in connected back-end systems or at the network layer from a single console view. It proactively monitors 100% of real user transactions, detect failed transactions, gather evidence necessary for triage and diagnosis of problems that affect user experiences and prevent completion of critical business processes. The proposed System will provide the following features:

- 1. The proposed solution must proactively monitor 100% of real user transactions, detect failed transactions, gather evidence necessary for triage and diagnosis of problems that affect user experiences and prevent completion of critical business processes.
- 2. The proposed solution must determine if the root cause of performance issues is inside the monitored application, in connected back-end systems or at the network layer from a single console view.
- 3. The proposed solution must provide deeper end-to-end transaction visibility by monitoring at transactional level.
- 4. The proposed solution must provide a single view that shows entire end-to-end real user transaction and breaks down times spent within the application components, SQL statements, backend systems and external 3rd party systems.
- 5. The proposed solution must gather available performance indicator metrics from all within realtime production environments and real user transactions 24x7 with minimal overhead on monitored applications without sampling.
- 6. The proposed solution must be able to provide root-cause probability graphs for performance problems showing the most probable root-cause area within application infrastructure.

- 7. The proposed solution must support any combination of operating platforms that support JDKs higher than 1.2 or Application Server (or .NET v1.1 and above) with a single methodology.
- 8. The proposed solution must provide a real-time application topology map to triage and quickly pinpoint the component causing a performance bottleneck in the end-to-end transaction flow.
- 9. The proposed solution must provide for easy dynamic instrumentation of application code, i.e. be able to enhance out of the box monitoring with extra monitoring definitions without having to restart application or JVM.
- 10. The proposed solution must monitor performance of all stored procedures being executed from within the Java/.NET application.
- 11. The proposed solution must be able to detect production Memory Leaks from mishandled Java Collections and Sets and isolate exact component creating leaking Collection or Set (or .NET Memory Leaks within the CLR).
- 12. The proposed solution must allow monitoring granularity of no more than 15 seconds for all transactions.
- 13. The proposed solution must provide real-time monitoring of resource utilization like JVM memory usage, Servlets, EJB pools, DB connection pools and Threads.
- 14. The proposed solution must be able to identify socket and file Input / Output activity from the application.
- 15. As a means of detecting poorly performing SQL, the solution must be able to proactively record all SQL calls, and report on the slow performing ones.
- 16. The solution should have provision for automatic transaction discovery, for example by setting up some bounding parameters to describe transactions like the web site, the language, and parameters (such as post, query, and cookies).
- 17. The proposed solution must monitor individual web service and performance transaction debugging for web services. The proposed solution must also monitor web services across multiple processes (cross JVM tracing).
- 18. The proposed solution must be able to report on any application errors occurred while executing application functionalities and pinpoint exact place of error within the transaction call stack.
- 19. The proposed solution must provide for at least 2 levels of thresholds which can be set on alerts and provide for actions so that alerts can automatically trigger other processes when thresholds are breached. The proposed solution must not necessitate any changes to application source code.
- 20. The proposed solution must proactively identify any thread usage problems within applications and identify stalled (stuck) threads.
- 21. The proposed solution should allow SQL statement normalization by aggregating hundreds of related SQL statements into a single performance metric using regular expressions and pattern matching.
- 22. The proposed solution must provide ability to monitor performance of applications up to the method level of execution (Java/.Net method) 24x7 in production environments with negligible impact on monitored application.

6.3.2 End-User Experience Monitoring System

This measures the end users experiences based on transactions without the need to install agents on user desktops. It detects user impacting defects and anomalies and reports them in real-time - Slow Response Time, Low Throughput, Partial Response, Missing component within transaction. The proposed System will provide the following features:

- 1. The proposed system must be able to provide the ability to create user groups based on application criteria or location and link user ids to user names and user groups.
- 2. The proposed solution should measure the end users' experiences based on transactions.
- 3. The proposed system must be able to detect user impacting defects and anomalies and reports them in real-time:
 - a. Slow Response Time
 - b. Fast Response time
 - c. Low Throughput
 - d. Partial Response
- 4. The proposed system must be able to provide user usage analysis and show how user's success rate, average time and transaction count has changed over a specific period of time such as current week versus previous week.
- 5. The solution should be deployable as an appliance-based system acting as a passive listener on the network thus inducing zero overhead on the network and application layer.
- 6. The proposed system must be able to provide root-cause probability graphs for performance problems showing the most probable root-cause area within application infrastructure.
- 7. The proposed system must be able to provide the ability to detect and alert when users experience HTTP error codes such as 404 errors or errors coming from the web application.

6.4 Integrated Helpdesk Management System

A Helpdesk Management Solution improves quality and responsiveness of IT support by automating help desk, self-service and root cause analysis. It provides flexibility of logging, viewing, updating and closing incident manually via web interface. The proposed System will provide the following features:

- 1. The proposed Helpdesk Management System must provide flexibility of logging, viewing, updating and closing incident manually via web interface. The web interface console would also offer power-users tips.
- 2. It must provide classification to differentiate the incident via multiple levels/tiers of categorization, priority levels, severity levels and impact levels.
- 3. It must provide support for various defined ITIL processes.
- 4. It must provide flexibility of logging, viewing, updating and closing incident manually via web interface. The web interface console would also offer power-users tips.
- 5. It must provide seamless integration to log incident automatically via system and network management.
- 6. It must be able to provide flexibility of incident assignment based on the workload, category, location etc.

- 7. The escalation policy would allow flexibility of associating with different criteria like device/asset/system, category of incident, priority level, organization and contact.
- 8. It must provide web-based knowledge database to store useful history incident resolution.
- 9. It must contain built-in knowledge tools system that can provide grouping access on different security knowledge articles for different group of users.
- 10. It must have an updateable knowledge base for technical analysis and further help end-users to search solutions for previously solved issues.
- 11. It must have the ability to track work history of calls to facilitate troubleshooting.
- 12. Each escalation policy must allow easy definition on multiple escalation levels and notification to different personnel via window GUI/console with no programming.
- 13. It must integrate with EMS event management and support automatic problem registration, based on predefined policies.
- 14. It must be able to log and escalate user interactions and requests.
- 15. It must provide status of registered calls to end-users over email and through web.
- 16. It must support tracking of SLA (service level agreements) for call requests within the help desk through service types.
- 17. It must be capable of assigning call requests to technical staff manually as well as automatically based on predefined rules, and should support notification and escalation over email, web etc.
- 18. It must have a top management dashboard for viewing the helpdesk KPI in graph & chart formats.
- 19. It must support remote management for end-user & allow analysts to do the desktop sharing for any system located anywhere, just connected to internet.
- 20. It must have an integrated CMDB for better configuration management & change management process.
- 21. Bidder to provide the minimum two user license for integrated helpdesk management system

6.5 Security Management System

With the ever-increasing number of security breaches and the potential of crippling the entire AFCS system of a city down with such kind of a breach, the importance of security of the entire system cannot be under-mined. While the external threats are warded off with provisioning of firewalls, anti-virus, Intrusion Detection and Prevention systems and cordoning off DMZs, the threat from internal users (departmental users and personnel of the contracted agencies) to the system also need to be recognized and guarded from. The Security Management solution must consist of the Log Record Collection and Management module:

6.5.1 Log Record Collection and Management

This helps automatically collate logs from the various infrastructure elements across the system, provides a graphical user interface/wizard to rules for normalizing custom log sources or modifying existing integrations, provides automated update mechanism for Content (product integrations and reports) and monitors the current status and relative health of the logging infrastructure. Client end agents may be used for collection / analyzing such logs. The proposed System will provide the following features:

- 1. The system shall provide automated update mechanism for Content (product integrations and reports). This process shall occur seamlessly and transparently without any customer intervention as part of the subscription update process.
- 2. The system shall provide a graphical user interface/wizard to rules for normalizing custom log sources or modifying existing integrations
- 3. The system shall support the following methods for log collection:
 - a. Windows Management Instrumentation (WMI) for remote collection from the Windows Event Log
 - b. Syslog
 - c. Raw Flow data
 - d. Text Log (flat file)
- 4. The system shall provide a mechanism to monitor the current status and relative health of the logging infrastructure.
- 5. The system shall have the capability to drag and drop building of custom queries & reports.
- 6. The system shall be capable of operating at a sustained 3000 EPS per collection device. The system shall provide the ability to scale to higher event rates by adding multiple collection devices.
- 7. The system shall have a secure and preferably embedded log repository to store logs that does not require separate database expertise to administer and manage.
- 8. The system shall have the capability for updates delivered and applied via an update service provided by the vendor to keep the system up to date. This includes the agents and it should be pushed centrally without having to reinstall the agents.

6.6 Other Key functional Requirements

- 1. The Solution should provide all the modules to monitor Networks, Servers and Applications in the same appliance.
- 2. The proposed system should provide correlation between Network, Server and Application automatically.
- 3. The proposed system should provide Business Service Management functionality to track Service quality by logically grouping Network, Server and Application components.
- 4. The solution must provide way to define key performance indicators (KPIs) within the Business Service Management module.
- 5. The solution must provide SLA measurement module to track service quality from both Availability and Performance perspective.
- 6. The solution must provide pre-defined reports.
- 7. The solution must provide custom data widgets to create custom dashboards for the teams, so as to visualize and collect real time and historical data from custom widgets.
- 8. The solution must provide multi-tenancy. Ex. Database Admin should have access to Database monitors only.

7 Functional Requirement - Business Intelligence Software Solution for Reporting

BI Solution shall enable SMC to build reports from AFCS and ITMS operations data to perform multi-dimensional analysis enabling to have better insight into parameters and enable SMC to take business decisions leading to higher operational efficiency.

The BIS Solution hence should offer following:

7.1 Management Dashboard

Interactive Visualization

- 1. Display information in an easy-to understand format and use intuitive and interactive visualization to enable management users within SMC to quickly navigate, understand, and investigate data elements to make informed decisions.
- 2. Allow users to capture and export the current display through electronic reports and in different printer-friendly formats, including, at a minimum, MS-Excel, PDF, and Web formats.
- 3. Have a default configuration and landing page for each user or user-group that are editable.
- 4. Allow multiple visual elements to be laid out on the same display.
- 5. Have the ability to display dashboards and reports using different visual elements including charts, maps, calendars, gauges, images, tables, visual and textual lists, and alerts as follows:
 - 5.1. All visual elements shall have editable titles, labels, legends, axes, icons, and colors, where applicable.
 - 5.2. Interactive visualization component shall display the overall aggregate status of a SMC's KPI with proper color coding (Green, Yellow, Red or as defined by SMC's preference) It will allow the user to drilldown and switch between different KPIs (e.g., KPI for average vehicle utilization, average vehicle duration, etc.)
 - 5.3. Display clickable contextual information related to the metrics being viewed and allows the user to drilldown on contextual information as required. Charts shall support at least the following chart types:
 - A. Bar Charts
 - B. Histograms
 - C. Line Charts
 - D. Heat Maps
 - E. Pie Charts
 - F. Grids
 - G. Area Charts
 - H. Timeline Charts
 - I. Bubble Charts
 - J. Radar Charts
 - K. Scatter Plots
 - L. Doughnut Charts
 - M. Pyramid Charts
- 6. Maps shall have GIS Maps extension to allow plotting different mark-ups and indications on a map view using base and spatial map layers and allow the user to zoom and pan freely through the map and be able to present heat map visualizations on GIS map data.

- 7. Calendars shall allow the user to intuitively navigate through calendar fields, such as day, month, and year. Calendars shall allow the user to intuitively navigate through calendar fields, such as day, month, and year. Gauges shall have the look and feel of an analog gauge (needle) with configurable level markings (green, yellow, red, or as defined SMC's management preferences) that gives a visual display of the amount, level, and measure of defined KPI Tables shall be able to:
 - Hold a large amount of data.
 - Allow the user to scroll through the data in all directions.
 - Freeze the header columns and rows when the user scrolls.
 - Allow the user to enlarge/decrease the font.

Visual and textual lists shall allow the user to scroll through all the available list items with smooth scrolling. Allow the user to choose the proper visual element required to display the required KPI data and allow the user to easily switch between alternative visual elements.

- 8. Have view-management tools, allowing the user to move, reorder, enlarge, shrink, open, and close visual elements with intuitive interaction.
- 9. Allow the user to create a new visual element based on the available visual element types and customize an existing visual element with an easy-to-use graphical interface.
- 10. Allow the user to save any customization done on a visual element.
- 11. Have zero-programming mashup capability that allows the user to configure queries and data mashups visually through drag-and drop functionality.
- 12. Allow the user to drill down to display increasingly detailed data on various data elements.
- 13. Allow intuitive visual filtering, focusing, and selection of the displayed data and information.
- 14. Automatically update the parameters and filters of the displayed data when the user drills down through visual elements and update the other visual elements accordingly. Also, enable selection of filters through the visual elements and propagate selection to all visual elements in the dashboard.
- 15. Allow the user to filter and sort the presented data based on a number of attributes including the time period or on multiple attributes simultaneously.
- 16. Allow the user to search through visual elements that display numerous data entries such as tables and lists.
- 17. Allow the user to save the current filter and selection parameters
- 18. Understand different types of structured data including numbers, percentages, fractions, general text, coordinates, and objects.
- 19. Store the user configuration and customizations information.
- 20. Have the ability to mashup different types of data from multiple sources with automatic detection of relationships between the data components and an option to manually define/overwrite relationship.
- 21. Run mathematical, statistical, and analytical operations on available data.
- 22. Compute trends and projections from data based on available historical data and based on data from external systems to enable informed decision-making.

7.2 Searching & Filtering

1. Allow the user to drill down and search through the large amounts of data easily and quickly by time periods and other search criteria defined by the user. Also, provide user guidance for searching & filtering through data

- 2. Generate reports from the current view in different electronic formats including at least MS-Word, MS-Excel, PDF, and Web formats and that are printer-friendly Not require programming knowledge or knowledge of SQL or databases to perform searches, queries, and filters
- 3. Allow reports to be sent directly to a network printer.
- 4. Display a huge amount of data in a clear and organized view.
- 5. Allow the user to hide or show parts of the data.
- 6. Offer the capability to search multiple data sources effortlessly through a GUI
- 7. Allow the user to search, filter, and sort the presented data based on any attribute or on multiple attributes simultaneously.
- 8. Allow the user to graphically define complex queries that contain multiple parameters and span different data sources.
- 9. Allow the user to search through historical data
- 10. Allow the user to save the current queries, filters, and selection parameters
- 11. Have data-pivoting capabilities
- 12. Understand different types of structured data including numbers, percentages, fractions, general text, coordinates, and objects
- 13. Store saved custom queries

7.3 Reporting

- 1. The system shall have the ability to allow the user to generate reports based on predefined report templates or by manually selecting the data and the corresponding visual elements.
- 2. The system shall have the ability to provide a GUI with drag-and-drop functionality for creating custom formatted reports that include visual elements, objects, and formulas.
- 3. The system shall have the ability to Display the list of available report templates, saved reports, and recently used report templates when the user logs in.
- 4. The system shall have the ability to Allow the user to create, load, modify, delete, and save report templates graphically.
- 5. The system shall allow reports to be generated and published on an ad-hoc or scheduled basis with the ability to predefine a list of recipients and a regular schedule through a GUI.
- 6. The system shall be able to generate reports in different electronic formats including at least MS-Word, MS-Excel, PDF, and Web formats and that are printer-friendly.
- 7. The system shall allow reports to be sent directly to a network printer.
- 8. The system should have the ability to generate planning and forecasting reports for providing the information related to planning for no of buses to be transported.
- 9. The system shall have the ability for the reports to have the ability to drill down to multiple levels
- 10. Reports should have the ability to print
- 11. Publish reports and dashboards for planned Vs. actual data, for example the system should allow the management user to view the planned budget vs. the actual revenue spent for a particular route
- 12. The system shall allow to publish reports and send them to recipients through email attachments and to a central data store to be accessed by different users.
- 13. The system should not require any programming knowledge, knowledge of SQL, or dataset to create self-service ad-hoc reports.

- 14. The system shall allow the user to use previously defined objects and formulas or create new custom objects and formulas and save them for repeated use.
- 15. The system shall allow the user to save any configuration done on a visual element.
- 16. The system shall have the ability to display data elements using different visual elements including charts, maps, calendars, gauges, images, tables, visual and textual lists, and alerts as follows:
 - All visual elements shall have editable titles, labels, legends, axes, icons, and colors where applicable.
 - Display the overall aggregate status of KPI with proper color coding (Green, Yellow, Red, or as defined per SMC's/Sitilink preference) and allow the use to perform an interactive visual drilldown and to switch between different KPIs.
 - Display clickable contextual information related to the KPI being viewed and allows the user to drill-down on contextual information as required.
 - Maps shall have capabilities to show different mark-ups and KPIs on a map and allow the user to zoom and pan freely through the map.
 - Calendars shall allow the user to intuitively and visually change the selected day, month, and year.
 - Images shall allow the user to zoom and pan within an image and move between images intuitively
 - Tables shall be able to hold a large amount of data, allow the user to scroll through the data in all directions, freeze the header columns and rows when the user scrolls, and allow the user to enlarge/decrease the font.
 - Visual and textual lists shall display an unlimited number of entries and allow the user to scroll through them.
 - Alerts shall be configurable allowing for different alerts with various icons and colors to be defined and displayed.
- 17. The system shall allow conditional formatting, based on thresholds or data ranges, for any cell/object in the report.
- 18. The system shall allow the display of multiple data elements and result sets in the same report.
- 19. The system shall allow the user to display historical data side-by-side or overlapping in views where applicable
- 20. The system shall display the generated report on screen.
- 21. The system shall have zero-programming mashup capability that allows the user to configure queries and data mashups visually through drag-and-drop functionality.
- 22. The system shall automatically update the parameters and filters of the displayed data when the user drills down through views.
- 23. The system shall allow the user to display historical data for the current filter and selection
- 24. The system shall offer the capability to add new data sources easily through a GUI.
- 25. The system shall allow the user to filter and sort the presented data based on any attribute including time period
- 26. The system shall allow the user to filter and sort the presented data based on one or multiple attributes simultaneously.
- 27. The system shall have mathematical capabilities to be used to manipulate data, including basic and advanced arithmetic and statistical operations.
- 28. The system shall allow the user to filter and search through the different data sources.
- 29. The system shall allow the user to save the current queries, filters, and selection parameters.

- 30. The system shall have data-pivoting capabilities.
- 31. The system shall store the report templates and generated reports.
- 32. The system shall understand different types of structured data including numbers, percentages, fractions, general text, coordinates, and objects.
- 33. The system shall have the ability to mashup different types of data from multiple sources with automatic detection of relationships between the data components and an option to manually select the required relationship.
- 34. The system shall run mathematical and statistical operations on available data.
- 35. The system shall compute trends and projections from data series.
- 36. The system should have capability to store the all the data, reports throughout the contract duration (Implementation Period + 5 Year post Go Live). Hence bidder to provide the necessary hardware to store data and reports as mentioned above.

7.4 System Reports

The system as a minimum shall be delivered with capability to generate following reports but not limited to this, a comprehensive list of reports further than the mentioned below shall be finalized at the time of requirement finalization stage & to be captured in Software Requirement Specification document.

- 1. Conductor / Driver Login reports for Day, week, month
- 2. Non-Compliance issues of different driver / conductors for the shift
- 3. Trip summary.
- 4. Bus Equipment Fault Summary
- 5. Hourly Bus Usage Summary
- 6. Total Commuters and revenue per Route, per Bus, per shift
- 7. Revenues collected on same bus, same route, same trips by different Conductors
- 8. ROI route wise, trip wise, shift wise
- 9. Passengers boarding bus at a Bus stop Time of day
- 10. Daily pass usage and its ROI for the passes validated
- 11. Student pass usage and the Cost of the subsidy that has to be refunded by Government-daily, weekly, monthly, yearly.
- 12. Origin Destination
- 13. SC Bus Usage by Route Number
- 14. Test Card Usage by route Number
- 15. SMC employees usage of services
- 16. Bus Service Disruption
- 17. En-route Ticket Inspector Summary
- 18. Boarding and Alighting Service
- 19. Boarding and Alighting statistics
- 20. Passenger KMS analysis per trip configurable by the user
- 21. Bus Rides and Revenue Statistics by Fare Code
- 22. Bus Equipment Transactions
- 23. Bus Faults Per Transactions Processed by Device
- 24. Cash Revenues as per SMC MIS
- 25. SCs not used for the week, Month
- 26. Bus Equipment Fault Summary

- 27. Half-Hourly Bus Usage Summary
- 28. Total Patronage
- 29. Bus Patronage and Revenue Statistics by Service Number
- 30. Bus Service Revenue and Passenger Statistics Summary
- 31. Boarding Ride Bus Stop
- 32. Summary of Bus Passengers Boarding by Service Number
- 33. System, Depot, Devices, STT CD parameters set current and pending future CD sets
- 34. Transfer Statistics
- 35. Any other customized reports as per requirement of the SSCDL/SMC/Sitilink.

The above-mentioned list of the types of the reports are indicative in nature. Bidder shall have to consider all efforts to development of the reports based on the experience in similar nature project and subjected to the availability of the data from the ITMS and AFCS application. BI Application shall have capability to generate all types of the reports with the available data in near real-time as well as back-up data.

The Service provider must have to provide authority a GRAPHICAL DASHBOARD to have visual view of all / some key reports/ parameters enabling quick decision making.

7.5 Data Retrieval & Management

General Data Retrieval

- 1. Provide fast, secure, reliable, and easy mechanisms to retrieve information and data from the different data sources to meet the dashboard KPI requirements.
- 2. Provide different mechanisms for retrieving data from different data sources including ETL, File Transfer, and Real-time integration.
- 3. Log all received information from entities.
- 4. Allow the user to define and connect new data sources and data stores effortlessly through a GUI.

7.6 ETL

- Perform ETL to extract, transform, and load operations to move the data from internal and external data sources to the staging environment and from the staging environment to the Storage environment.
- 2. The system shall have the ability to perform multiple transformations on data including but not limited to
 - a. Selection
 - b. Translation
 - c. Encoding
 - d. Derivation
 - e. Sorting
 - f. Joining (merging)
 - g. De-duplicating
 - h. Aggregation
 - Transposing (pivoting)

- j. Splitting
- k. Lookup
- 3. Provide the ability to define, configure, and manage ETL jobs.
- 4. Support import and export wizard and supporting connections with source and destination adapters including but not limited to OLEDB, flat files, and XML formats.
- 5. Have scheduling capabilities based on time, events, and triggers
- 6. Offer the capability to define and connect new data sources and destinations effortlessly through a GUI
- 7. Provide a user-friendly GUI to allow the user to handle ETL processes including:
 - a. Modifying data feeds
 - b. Changing of business logic used for data ETL
 - c. Modifying ETL parameters
 - d. Creating
 - e. Editing
 - f. Executing a large number of transformation rules
- 8. Allow the user to view the data at different stages
- 9. Allow the user to search, filter, and sort the data by stage, source, and type
- 10. Allow the user to search the metadata
- 11. Support batch data extraction, transformation and loading
- 12. Store ETL rules and schedule
- 13. Store the data at different stages including the raw data

Real-Time Integration with data sources

- 1. The system shall have the capability to integrate with data sources on the real time basis to fetch the information
- 2. The system shall be able to quickly retrieve the data with minimal time lag
- 3. The system shall have the ability to capture the failed transaction

File Transfer

- 1. The system shall support data retrieval through transferring files automatically using secure file transfer protocols such as the Secure File Transfer Protocol (FTP over SSL) protocol.
- 2. The system shall support automatic file upload capabilities that can detect a new file and upload it.
- 3. The system shall automatically rename the uploaded file to a proper filename including the source, date and version, based on configurable file-naming rules
- 4. The system shall properly manage duplicate submissions by keeping the old file and applying proper versioning and renaming
- 5. The system shall provide an intuitive graphical interface to AVLS Backend Users to:
 - Define the methods and rules for the file transfer such as maximum file size and supported types.
 - Define and manage the connections, file sources, file destinations, file processing, and file storage.
- 6. The system shall allow the Backend Users to view file transfer history with filter and sort Capabilities
- 7. The system shall perform quality management on data provided through file transfer

- including validation and verification of file type and size and return errors and required corrections accordingly
- 8. The system shall be able to receive and store large files as specified in the configurable file transfer rules
- 9. The system shall Be able to store a history of uploaded files information and content

7.7 Data Quality Management

- Perform data cleansing, verification, validation, and reconciliation automatically and based on defined rules
- 2. Allow the user to manage the data quality process workflow and rules using a GUI
- 3. Compare the data to historical data as reference data for detecting anomalies
- 4. Rank the completeness and validity of the processed data
- 5. Store data quality verification rules and process workflow
- 6. Store historical data

Data Stores

- 1. Retrieved data from different data sources should be temporarily stored and processed in separate Operational Data Stores (ODSs).
- 2. Data used to perform visualization, reporting, and searching operations should be stored in appropriate Storage environment (e.g., Data warehouse)

7.8 BI Configuration and Management

- 1. The system shall allow the authorized user to complete the following functions:
 - Manage the different KPIs available by adding, modifying, or deleting KPIs or KPI groups areas using a GUI.
 - Enable or disable KPI which activates or inactivates it but does not delete it (soft deletion).
 - Configure a KPI including its ID, name, description, area, data source, format, unit, frequency, and formula.
 - Configure the user access level required to view each KPI.
 - Choose the default and alternate views for displaying a KPI.
 - Drill down by clicking on a KPI to view its details and edit it.
 - Search, sort, and filter KPIs by ID, name, frequency, measure, and indicator area.
 - Show/hide disabled KPIs from the KPI management screen.
 - Manage data sources for the KPIs easily through a GUI.
- 2. The system shall have the ability to present an intuitive GUI allowing the authorized user to configure the threshold values and levels (green, yellow, red, or as defined per management preference) for a KPI by defining score card algorithms.
- 3. The system shall have the ability to clearly present multiple KPIs in the same view
- 4. The system shall have the ability to Configure KPIs that are aggregates of multiple other KPIs from different areas
- 5. The system shall have the ability to instantly and automatically update the other dashboard components with any new KPI or changes to the configuration of current KPIs

- 6. The system shall have the ability to Store each KPIs current and historical measure
- 7. The system shall have the ability to Configure KPIs with multiple data sources
- 8. The system shall have the ability to run algorithms to calculate the measure of a KPI based on data from subset KPIs
- 9. The system shall have the ability to Store the different access levels for each of the authorized users.

7.9 Dashboard and Reporting Requirement for ITMS

The list of reports given below is partial list and is being provided for the sake of understanding from the perspective of providing insight into the type of solution required to meet SMC's business process requirement.

List of Daily Reports needed for the service performance monitoring:

Category: Bus Maintenance and Availability

• Bus Availability

How many buses are available in the depot at the beginning of the shift daily?

Bus Breakdowns

How many buses are in the workshop for repairs, how many buses breakdown during while in service? When multiple routes are operations, this information will be needed per individual route as well.

Bus kilometers between two breakdowns of same bus (individual bus wise)

• Bus Maintenance

Individual Bus report consists of preventive maintenance and all other work done on that bus with kilometers.

Schedule Adherence of individual trip of bus

Scheduled adherence report based on published schedule and actual schedule. Ability to sort the report by the operator by the trip will be useful.

• Operational Issues on Field: Bus bunching etc.

Incident reports to be generated based on information gathered by the control room on a daily basis. These reports should have bus number, trip number, operator number, time of the day, type of incident.

Category: On Time Performance

Definition of On Time Performance will be finalized in consultation with SMC. Time Points within individual routes will be introduced for OTP. For all OTP, need % early, % OT and % late.

• Scheduled KM by trip versus Actual KM by trip and Summary for day

The report will have scheduled kilometers against actual kilometer by trip and by day. When multiple routes are operational, this information will be needed per individual route as well. The report should generate missed trips or missed kilometers per individual routes.

• On Time Performance (OTP) for Individual Trip

System and trip on time performance report for individual routes and feeder routes.

- Daily peak, base and evening performance OTP
- Cumulative daily performance OTP
- Weekdays and weekend performance OTP
- Waiting time of bus at the junction and time to clear the junction during off peak, medium peak and peak hours.
- Speed of a bus between stations
- Speed violation

Category: Station and Passenger Information

• Arrival and departure per station by individual trip

The report should be generated to give arrival and departure information per station for individual trips. Then for each station, the average dwell time should be calculated and measured against the total number of boarding if available.

- Using Smart Card
 - o Origin and destination of a trip and length of trip
 - o Boarding and alighting information by individual stations by direction of route
 - o No of trips per day and per month
 - o No of trips per day and per month of individual smart card user
 - o Per station Revenue
 - o Per Bus Revenue
 - Ticket Consolidation report
 - Settlement report

Data for fare and revenue shall be provided by the fare collection software provider agency and Service provider shall be required to incorporate the same in dashboards and reporting.

7.10 Transit Performance Measures

	Service Offered /	Utilization				
1	Average Daily Ridership	Total no. of passengers travelled in a				
		month / No. of days				
2	Total Monthly Ridership	Total no. of passengers travelled in a				
		month				
3	Average Trip Length	Total of (Passenger * KMS travelled) in a				
	Weekday	day / Total passengers travelled in a day				
	Weekend					
4	Vehicles operated in Maximum Service/Day	Total no. of buses operated during peak				
		hours				
5	Vehicle utilization/Day	Total KMS travelled by a bus in a day				
	Econom					
6	Passenger / revenue KM	Total passengers travelled in a bus / total				
	F /	revenue KMS of buses in a month				
7	Fares / revenue km	Total fare collection in a month / total revenue KMS of buses in a month				
8	Vehicle Operating expenses / revenue km	As per contract				
	Operating Ratio	Cost per bus / earning per bus				
9	Staff / bus ratio	Total staff utilized for each bus operations				
10	Availabil	_				
11	Service Coverage	As per the corridor in operation				
		As per the corridor in operation				
12	Frequency of buses During Peak					
	Medium Peak					
	During off peak	_				
13	Hours of Service	No. of operational hours of BRTS				
14	Average Waiting Time for users	· · · · · · · · · · · · · · · · · · ·				
•	Convenie	ence				
15	Passengers / trip	Total no. of passengers in a day / total no.				
	During peak hours	of trips of buses in a day				
	During off peak hours					
16	Dwell Time	Avg. dwell time of buses at bus stops				
17	Load factor	(Passenger-km / capacity-km) * 100				
		Inverse of (Breakdown/million KM)				
18	Safety	Inverse of (accidents/million KM)				
	Fatality rate / Km	Total fatalities / total length of BRTS				
		corridor				
	Fatality rate for pedestrian & NMT	Total no. of fatalities of pedestrian and				
		NMT / total fatalities on road				
19	Signalized intersection delay for pedestrians	Waiting time of pedestrians at intersections to reach PRTS bug step				
	Vehicular Ca	intersections to reach BRTS bus stop				
20	Bus Capacity	Designed capacity of bus				
21	Bus lane Capacity	Passengers in peak hour peak direction				
22	Volume–to–capacity ratio	Comparison of capacity usage				
22		1 2 2 2				
	Speed / Delay					

23	Average Travel Speed of BRTS	Average travel speed of BRTS bus during
		peak hours

7.11 Dashboard and Reporting Requirement specific to AFCS

The list of reports given below is partial list and is being provided for the sake of understanding from the perspective of providing insight into the type of solution required to meet SMC's business process requirement.

List of Daily Reports needed for the service performance monitoring:

Category: Station and Passenger Information

Arrival and departure per station by individual trip

The report should be generated to give arrival and departure information per station for individual trips. Then for each station, the average dwell time should be calculated and measured against the total number of boarding if available.

Using Smart Card

- > Origin and destination of a trip and length of trip
- > Boarding and alighting information by individual stations by direction of route
- ➤ No of trips per day and per month
- No of trips per day and per month of individual smart card user
- > Per station Revenue
- > Per Bus Revenue
- ➤ Ticket Consolidation report
- > Settlement report

8 Technical Specifications

8.1 Server (As Building block, to establishing computing solution for sub systems/solutions)

#	Parameter	Minimum Specifications	Bidder's Compliance	Remarks, if
			(Yes/No)	any
1.	Form factor	Rack		
2.	Processor	Latest series/Generation of 64 bit		
		x86 processor(s) with 8 or higher		
		Cores		
		Processor speed should be		
		minimum 2.4 GHz Minimum 2		
		processors each physical server		
		Specify Processor Model		
		Specify Processor Speed		
		Specify No. of Cores		
		Specify Cache		
		Specify No. of Processors		
		Proposed		
3.	RAM	• DIMM Slots must be		
		supporting 2400		
		MHz/2666MHz memory		
		frequency		
		Memory DIMM Slots must be		
		supporting 8GB / 16GB /		
		32GB /64GB/128GB memory		
		modules		
		Minimum 64 GB Memory per		
		physical server		
		Specify Maximum RAM supported		
		Specify Total RAM proposed		
4.	Chipset	Compatible latest series of chipset		
	T . 10.	(specify chipset)		
5.	Internal Storage	Minimum 2 x 600 GB SAS (10k		
		rpm) hot swap		
		Specify the No. of HDD Slots Supported		
		Specify the HDD Capacity Offered		
		Specify the HDD Composition		
		proposed with capacity of each		
		type of HDD		
6.	Storage	Servers must be equipped with		
	Controllers	RAID Controller supporting RAID		
	nd by Curat Smart City I	0,1		

#	Parameter	Minimum Specifications	Bidder's Compliance (Yes/No)	Remarks, if any
7.	Network	2 X 10GbE LAN ports for		
	interface	providing Ethernet connectivity		
8.	Storage	2 X Single-port 16Gbps FC HBA		
	Connectivity	for providing FC connectivity		
	Interface			
9.	Power Supply	Minimum 750W Hot Swappable		
	(for Rack Server)	High Efficiency Redundant Power		
		Supplies (1+1) capable to provide		
		necessary power for fully loaded		
		server with C14 to C13 PDU Power		
	3.6 1' T7'!	Cables		
10.	Mounting Kit	Sliding Rack mounting kit in case		
	0 1	of rack server		
11.	Operating	Licensed version of 64-bit latest		
	System	version of Red Hat Linux/		
		Unix/Microsoft® Windows based		
		Operating system) as supported in		
10	Virtualization	proposed EMS & BI solution Shall support Industry standard		
12.	Virtualization	virtualization hypervisor like		
		Hyper-V, VMWARE, Oracle VM		
		etc. OEM of the blade chassis /		
		rack and servers offered.		
13.	Warranty	24 x 7 Five (5) years on-site back to		
		back comprehensive warranty		
14.	Quantity	Specify the quantity of the		
		proposed server as per the solution		
		architecture of EMS & BI Solution		

9 Responsibility Matrix and Key Deliverables

9.1 Responsibility Matrix

The roles of the stakeholders shall change over a period of time as the project will evolve from design to implementation and enter the operations phase. Stakeholders' responsibilities for the design & implementation phase, operational phase is given below:

Various Stakeholders identified for this project are as below:

#	Particular	Details	
1.	SMC	Surat Municipal Corporation	
2.	SSCDL	Surat Smart City Development Limited	
3.	Sitilink	Sitilink	
4.	PMC	Project Management Consultant	
5.	AFCS SI	Existing System Integrator for AFCS project	
6.	ITMS SI	Existing System Integrator for ITMS project	
7.	NSP	Existing Network Service Provider	
8.	SI	Systems Integrator (Vendor to be selected for the Project's	
		Implementation)	
9.	ICCC	Integrated Command and Control service provider	

Responsibilities are shown using **RACI Matrix** which splits project tasks down to four participatory responsibility types that are then assigned to different Stakeholders in the project.

R (Responsible) Those who do work to achieve the task

A (Accountable) The Stakeholder that ultimately accountable for the task **C (Consulted)** Those whose opinions are sought (2-way communication)

I (Informed) Those who are kept up to date on progress (1-way communication)

#	Activity	SSCDL/ SMC/Sitilink	PMC	AFCS SI	ITMS SI	Network Service Provider	SI	ICCC Service Provider
	A. Project Incept	tion Phase						
1	Project Kick Off	С	C	I	I		R/A	
2	Deployment of manpower	C	C				R/A	
	B. As Is Assessment and Project inception Report							
3	Assess the requirement of IT Infrastructure and Non-IT Infrastructure for EMS system and BIS Solution	С	С	I	I		R/A	
4	Assess the reusability of existing infrastructure established by SMC for AFCS	С	С	С	С		R/A	

#	Activity	SSCDL/ SMC/Sitilink	PMC	AFCS SI	ITMS SI	Network Service Provider	SI	ICCC Service Provider
	and ITMS							
5	Assessment and Detailing of Existing Software Requirements	С	C	C	C		R/A	
6	Assessment and detailing of integration requirement with existing ITMS & AFCS Application	С	С	С	С		R/A	
7	Prepare and submit the Assessment report for this project	С	C				R/A	
	C Implementation	on Phase			l .	I		
8	Procurement and Supply of EMS Software & BI Software and other equipment (IT and Non-IT infrastructure) as per price bid	С	С				R/A	
9	Inspection and approval of all supplied materials (IT and Non-IT infrastructure) and software for EMS System and BIS Solution	R/A	R/A				C/R	
10	Getting approval for space, Raw power and permission for installation of IT infrastructure for this project	С	С				R/A	
11	Installation and configuration of IT/Non-IT infrastructure which has been procured under the scope of this project	С	С				R/A	
12	Installation and configuration for EMS system and BIS Solution as	С	C				R/A	

#	Activity	SSCDL/ SMC/Sitilink	PMC	AFCS SI	ITMS SI	Network Service Provider	SI	ICCC Service Provider
	per scope of this RFP.					Trovider		Trovider
13	API development of Existing System	С	С	R/A	R/A		С	R/A
14	API development of Proposed System/Software	С	С	С	С		R/A	С
15	Integration of EMS system with AFCS project components.	C	С	I			R/A	
16	Integration of BIS Solution with AFCS and ITMS project software.	C	С	I	I		R/A	
17	SLA Configuration of AFCS Project in the proposed EMS Software	С	С	I			R/A	
18	Integration of EMS & BI system with ICCC as per the scope	C	С				R/A	I
19	SoP Preparation and Implementation	С	С				R/A	
20	Development of test cases (Unit, System Integration, User Acceptance)	С	I				R/A	
21	User Acceptance Testing (UAT)	C- End User Sitilink	I				R/A	
22	Implementation of Solution as per requirement	С	I				R/A	
23	Assessment of training needs and Preparation of User Manuals, training curriculum and training materials	С	I				R/A	
24	Go-Live of the project	C	C	I	I		R/A	I
	D. Onsite Warra	nty and O&M S	upport P	hase				
25	Maintenance of all EMS System and BIS Solution including all IT, Non-IT infrastructure,	С	С				R/A	
-	and by Surat Smart City	D 1		•	•			ge 60 of 165

#	Activity	SSCDL/ SMC/Sitilink	PMC	AFCS SI	ITMS SI	Network Service Provider	SI	ICCC Service Provider
	Software and Applications							
26	Maintaining SLA as per the scope of this Project and Performance Monitoring	С	С				R/A	
27	Logging, tracking and resolution of issues for this project	C	C				R/A	
28	Patch & Version Updates	C	C				R/A	

9.2 Key Deliverables

#	Key Activities		Key Deliverables
1.	Project Kick Off	1.	Project Plan
2.	Deployment of manpower	2. 3.	Escalation Matrix Risk Management and Mitigation Plan
3.	Assess the requirement of IT Infrastructure and Non-IT Infrastructure	1. 2.	Assessment Report Functional Requirement Specification document
4.	Assessment of Application interface pre-requisites requirements	3. 4.	Pre-requisite requirement document Detail Design Document
5.	Assess the Integration requirement	5. 6.	Bandwidth Requirements location wise Customization Requirement
6.	Assess the Bandwidth requirement for all locations covered under the scope of "AFCS Project"	7.	Reusability of existing AFCS and ITMS infrastructure
7.	Assess the existing AFCS and ITMS IT and Non-IT infrastructure which can be reutilized		
8.	Assess the Customization requirements if any to meet the RFP scope		
9.	Assessment of training requirement		
10.	Formulation of Solution Architecture	1. 2.	Customization detail if any Test Plans
11.	Development of test cases (Unit, System Integration and User Acceptance)	3. 4.	SoPs Change management Plan

#	Key Activities	Key Deliverables
12.	Preparation of details with respect to the Customization requirement if any	
13.	SoP preparation based on extensive consultation with all stakeholders	
14.	Procurement of equipment/Software and other materials	IT and Non-IT Infrastructure Installation Report Software Installation Report
15.	Physical Infrastructure setup	3. Customization report if any
16.	Development, Testing and Production environment setup	4. Completion of UAT and closure of observations report 5. Training Completion report
17.	IT and Non-IT Infrastructure Installation	6. Application deployment and
18.	Implementation of EMS Solutions with related software and BIS Solution	configuration report 7. Hardware warranty documents 8. Training
19.	Incorporation of Customization in EMS Software and BIS Solution	9. Training Manuals 10. BI Solution Reports 11. Customization of BIS Solution modules
20.	Integration of solutions with Command-and- Control Centre ICCC Application	and reports
21.	Unit and User Acceptance Testing	
22.	Preparation of User Manuals, training curriculum and training materials	
23.	Role based training(s)	
24.	SoP implementation	
25.	Helpdesk setup	
26.	Integration Test, FAT	1. Integration Testing Report
		2. FAT Report
1.	Go Live	1. Go-Live Report
2.	Operation and Maintenance during comprehensive onsite warranty and O&M support for EMS system and BIS Solution	 Detailed plan for monitoring of SLAs and performance of the overall system Fortnightly Progress Report Monthly SLA Monitoring Report and
3.	SLA and Performance Monitoring	Exception Report
4.	Logging, tracking and resolution of issues.	4. Quarterly security Report 5. Issues logging and resolution report
5.	Application enhancement	6. Operations manual for all components

#	Key Activities	Key Deliverables
6.	Patch & Version Updates	7. BI Solution Reports8. Customization of BIS Solution modules and reports

Note: The above-mentioned deliverables are indicative and may change based on project requirement and as instructed by SSCDL/SMC.

10 Eligibility Criteria

10.1 Bidder's Eligibility Criteria

The bidder must possess the requisite experience, strength and capabilities in providing services necessary to meet the requirements as described in the RFP document. Keeping in view the complexity and volume of the work involved, following criteria are prescribed as the eligibility criteria for the bidder interested in undertaking the project. The bidder must also possess technical know-how and financial ability that would be required for comprehensive onsite warranty and O&M support services sought by the SSCDL for the entire contract duration. The bids must be complete in all respect and should cover entire scope of work as stipulated in the bid document. This invitation to bid is open to all bidders who qualify the eligibility criteria as given below:

The Bidder's Eligibility Criteria for the selection of the SI are given below. In case of consortium, please refer the section 11.6.

Note: For evaluation following definition is considered

- 1. The completion/implemented project is defined as those projects that have been supplied, installed, commissioned and gone live in last 7 years from the date of publishing of this RFP.
- 2. The total Project value shall be considered as Capex Cost + Opex Cost.
- 3. OEM experience will not be considered for Eligibility Criteria and Technical Evaluation as bidder's experience unless bidder is also an OEM.

#	Eligibility Criteria	Proof Document Required
1.	under the Companies Act 1956/2013 and subsequent amendments thereto and should be operational in India for a period of at least 7 years from the date of	Copy of certification of incorporation issued by competent authority Copy of PAN card
	publishing of this RFP. In case of Consortium, the Consortium Partner should be registered under the Companies Act 1956/2013 and subsequent amendments thereto or a partnership firm registered under LLP Act, 2008	Copy of GST registration Certificate
2.	The Bidder (Consortium)/Sole Bidder jointly should have minimum average annual turnover of Rs. 5 crores from ICT based business in last three financial years (i.e., FY 2019-20, 2020-21, 2021-22). In case of consortium, each partner should have minimum average annual turnover of Rs. 1 crores from ICT based business in last three financial years (i.e., FY 2019-20, 2020-21, 2021-22).	Copy of the audited profit and loss financial statements Certificate from the statutory auditor / CA clearly specifying the annual turnover for the specified years. Note: The Original or Notarized copy of the certificate should be submitted

#	Eligibility Criteria	Proof Document Required
	If FY 2021-22 Financial Statements of any bidder is unaudited then the Audited Financial Statements of 2018-19 along with an undertaking letter from the bidder that the 2021-22 Statements are not audited is to be submitted.	
3.	The bidder (each of consortium member) should have a positive net worth, as on 31st March 2022. If 2021-22 Financial Statements of any bidder is	Copy of audited profit and loss financial statementCertificate from the statutory auditor / CA clearly specifying the net-
	unaudited then Bidder should have a positive net worth as on 31st March 2021. Moreover, an undertaking letter from the bidder that the 2021-22 Statements are not audited is to be submitted	worth for the specified years. The Original or Notarized copy of the certificate should be submitted
4.	The Sole bidder/ Bidder (In case of consortium as per R&R defined in Consortium Agreement) should have supplied, installed, and commissioned EMS Solution	Copy of completion / Go Live certificate issued by client,
	for health monitoring of IP/SNMP based equipment's for any of the following criteria in last 7 years from the date of publishing this RFP in India as below:	Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order
	At least one project covering minimum 1200 IP/SNMP based equipment	Copy of contract agreement with client
	OR Two Projects each covering minimum 750 IP/SNMP based equipment	Project Citation on bidder's letterhead as per format attached
	OR Three Projects each covering minimum 600 IP/SNMP based equipment	
5.	The Sole bidder/ Bidder (In case of consortium as per R&R defined in Consortium Agreement) should have supply, installation and integration of Business	Copy of completion / Go Live certificate issued by client,
	Intelligence Solution(BI) for Public Transport Organization in India in last 7 years from the date of publishing this RFP in India.	Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order
		Copy of contract agreement with client
		Project Citation on bidder's letterhead as per format attached
6.	The bidder (all member of consortium) should not have been blacklisted or debarred by any Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of India/Any Government Agency in India as on the date of bid submission.	Self-declaration by the Bidder(All the members of the Consortium individually, in case the Bidder is a consortium) duly signed by the authorized signatory on non-judicial stamp paper of INR 300.

#	Eligibility Criteria	Proof Document Required
		Note: Original or Notarized copy of self-declaration should be submitted.

10.2 OEM's Eligibility Criteria

To be considered qualified for evaluation of Technical Proposal, the respective OEM must meet the below mentioned OEM eligibility criteria:

#	Selection criteria for the OEM	Proof Document Required
A	Enterprise Management System (EMS)	
1.	As on bid submission date, OEM must have supplied EMS System for the health monitoring of IP/SNMP based equipment for minimum 3 projects in India pertaining into the ITMS/Transit Domain/Smart City with average installation base of 1200 equipment in each Project	Copy of Work order clearly highlighting scope of work, which should include EMS Software with Software Client certificate specifying the successful running of EMS software for the project. Client document must clearly indicate the no. of equipment managed.
2.	Commitment to Support The OEM should commit to support the proposed product equipment / software for the duration of minimum 6 years from the date of Bid submission. End of life/End of Sale/order should not have been announced for the proposed product.	OEM self-certification as per Section-TQ_10 indicating the commitment to support along with product roadmap
В	Business Intelligence Software Solution (BIS So	lution)
3.	As on bid submission date, OEM must have supplied Business Intelligence System for integrated Management Information System (MIS) for minimum 3 projects in India pertaining into the Integrated Transit Management System/Transit Domain.	Copy of Work order clearly highlighting scope of work which should include BI Software
		Client certificate specifying the successful running of BI application software for the project.
4.	Commitment to Support The OEM should commit to support the proposed product equipment / software for the duration of minimum 6 years from the date of Bid submission. End of life/End of Sale/order should not have been announced for the proposed product.	OEM self-certification as per Section-TQ_10 indicating the commitment to support along with product roadmap

11 Instructions to Bidder

- 1. Bidders are advised to study all instructions, forms, terms, requirements and other information in the Bid Documents carefully.
- 2. 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.
- 3. 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.
- 4. Additionally, proposals of only those Bidders who satisfy the Conditions of Eligibility, stated herein, will be considered for evaluation by SSCDL.

11.1 Purpose of Bid Document

- 1. The purpose of this tender is to select a System Integrator (SI) for Design & Development of Enterprise Management System (EMS) & Business Intelligence Software Solution (BIS Solution) for Surat City BRTS Projects of Surat Municipal Corporation. This document provides information to enable the bidders to understand the broad requirements to submit their 'Bids'.
- 2. The manner in which the Proposal is required to be submitted, evaluated and accepted is explained in this RFP. The detailed scope of work is provided in this RFP document.
- 3. The bidder shall be required to submit their bid in two parts –Technical Bid (Bidder's Eligibility criteria documents, Technical Proposal documents) and Commercial Bid

11.2 Proposal Preparation Cost

- 1. 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 SSCDL 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.
- 2. This Bid Document does not commit the SSCDL 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 SSCDL/ SMC and may be returned at its sole discretion.

11.3 Online Pre-bid Queries

- 1. A prospective Bidder requiring any clarification on the RFP Document may submit his queries, via email, to the following e-mail id on gor before as mentioned in Notice Inviting Tender. Email Id for submission of queries: **brts@suratmunicipal.gov.in**
- 2. The queries should necessarily be submitted in the following format:

Bidders Request for Clarification		
Name and Address of the	Name and Position	Contact Details of the
Organization submitting	of Person	Organization / Authorized
request	submitting request	Representative
		Tel:
		Mobile:
		Fax:
		Email:
# RFP Document	Content of the RFP	Clarification Sought
Reference (Section	requiring	
No., Page No.)	clarification	

3. Queries submitted post the above-mentioned deadline, or which do not adhere to the above-mentioned format may not be considered.

11.4 Amendment of RFP Document

- 1. At any time before the deadline for submission of bids, the SSCDL, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by an amendment.
- 2. The bidders are advised to visit the http://suratsmartcity.com/Tenders and https://smc.nprocure.com on regular basis for checking necessary updates. SSCDL also reserves the rights to amend the dates mentioned in this RFP for bid process.
- 3. In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the SSCDL may, at its discretion, extend the last date for the receipt of Bids.

11.5 Conflict of Interest

1. A "Conflict of Interest" is any situation that might cause an impartial observer to reasonably question whether Bidder actions are influenced by considerations of your firm's interest at the cost of Government. The Bidder agrees that it shall hold the SSCDL's interest paramount, without any consideration for future work, and strictly avoid any Conflict of Interest with other assignments of a similar nature. In the event the Bidder foresees a Conflict of Interest, the System Integrator shall notify SSCDL forthwith and seek its approval prior to entering into any arrangement with a third party which is likely to create a Conflict of Interest.

- 2. Bidders shall not have a conflict of interest that may affect the Selection Process or the scope (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified.
- 3. SSCDL requires that the Bidder provides professional, objective, and impartial advice and at all times hold the SSCDL's interest's paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work.
- 4. The System Integrator shall disclose to SSCDL in writing, all actual and potential Conflicts of Interest that exist, arise or may arise (either for the System Integrator or its team) during the term of the Agreement as soon as it becomes aware of such a conflict.

11.6 Consortium Condition

The number of consortium members cannot exceed two, including the Prime Bidder.

A Bidder applying individually or as consortium member shall not be entitled to submit another application either individually or as a member of any other consortium, as the case may be.

Consortium members must provide a Memorandum of Understanding (MoU) covering above points and showing their intention to enter into such an Agreement at the time of bidding along with Pre-Qualification Bid.

A Bidding Consortium is required to nominate a Prime Member. The formation of the consortium including identification of Prime member and role and responsibilities of each member/s shall be supported by Memorandum of Agreement and Power of Attorney signed by all the members on a stamp paper of INR 300/-.

The successful bidder (SI) shall require to enter into agreement with all members of Consortium Members specifying following points in the Agreement. These points shall also be captured in MoU

Identity Prime Member and Power of Attorney in favor of Prime Member.

Roles and responsibilities of each consortium partner, the identification of the lead partner, and providing for joint and several liability for each partner/s.

All consortium members would be available throughout the Contract Period.

Each member of the Consortium shall be jointly and severally liable for the due implementation, and operation and maintenance of the Project.

The role and responsibility of any member must be commensurate with the technical/financial capabilities that such member is contributing towards meeting the qualification criteria. Each consortium member is liable to contribute resources in terms of knowledge, skills and trained manpower commensurate with its role and responsibilities during the Contract Period.

The Consortium Agreement must also state that the period of the Agreement would coincide with the Contract period. Consortium must continue to be in existence during the period of the contract and that any change will be subject to approval of the Authority (SSCDL) only.

The final contract between the consortium members (The Consortium Contract) would be available for legal vetting and open to suggestions by the SSCDL. SSCDL will suggest binding corrections if it finds that such contract does not meet its requirements and interests as per the Tender in letter and spirit.

The Agreement should be on stamp paper and notarized. The signatories must be duly authorized.

Any modification in roles and responsibilities between consortium members during Contract Period shall be allowed only after approval from SSCDL. Any changes and deviation of roles and responsibilities of consortium members during the execution, operation and maintenance of this Project without prior approval of Authority shall be viewed seriously by the SSCDL as it can affect an important public service. Such unilateral action by the SI shall entitle SSCDL to take appropriate action including considering it an Event of Default under this Contract leading to consequences including termination with appropriate notice.

Any Dispute arising during Contract Period between the Consortium Member/s shall be resolved amicably without adversely impacting Project Implementation and Operation. If in SSCDL's opinion, Dispute between Consortium members adversely impacting implementation and operation of the Project then Authority may its sole discretion in the interest of the Project (a) Terminate the Contract after due process and/or (2) Provide a binding solution.

In case SSCDL Intends to proceed for Termination on account of SI Event of Defect and /or unresolved disputes between the Consortium Members, both the Consortium Members shall be jointly and severally liable for Implementation, Operation and Maintenance of project at Agreed prices and payment terms specified in this Tender till Authority or any new agency appointed by it takes over the Project. SSCDL reserves the right to reject the Bid in case of change in the constitution of the consortium after the submission of Bid and before the execution of the Agreement

11.7 Right to amendment of the project scope

- 1. SSCDL retains the right to amend the scope of work or amend the program for service delivery at any time and without assigning any reason. SSCDL makes no commitments, express or implied, that the full scope of work as described in this RFP will be commissioned.
- 2. The bidder's technical and commercial proposals received in this process may result in SSCDL selecting to engage with the bidders' in further discussions and negotiations toward execution of a contract including finalization of the scope elements. The commencement of such negotiations does not, however, signify a commitment by the SSCDL to execute a contract or to continue negotiations. SSCDL may terminate negotiations at any time without assigning any reason.

11.8 SSCDL rights to terminate the selection process

1. SSCDL may terminate the RFP process at any time and without assigning any reason. SSCDL makes no commitments, express or implied, that this process will result in a business transaction with anyone.

- 2. This RFP does not constitute an offer by SSCDL.
- 3. The bidder's participation in this process may result in SSCDL selecting the bidder to engage in further discussions and negotiations toward execution of a contract. The commencement of such negotiations does not, however, signify a commitment by the SSCDL to execute a contract or to continue negotiations. SSCDL may terminate negotiations at any time without assigning any reason.

11.9 Right to reject any proposal

- 1. Notwithstanding anything contained in this RFP, SSCDL reserves the right to accept or reject any Proposal and to annul the Selection Process and reject all Proposals, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons, therefore.
- 2. Besides other conditions and terms highlighted in the Tender Document, bids may be rejected under following circumstances:

General Rejection Criteria

- a. Conditional Bids.
- b. If the information provided by the Bidder is found to be incorrect / misleading / fraudulent at any stage / time during the Tendering Process.
- c. Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions.
- d. Bids received after the prescribed time & date for receipt of bids.
- e. Bids without signature of person (s) duly authorized on required pages of the bid.
- f. Bids without power of attorney/ board resolution or its certified true copy.

Technical Rejection criteria

- a. Bidders not complying with the Eligibility Criteria given in this Tender document
- b. Technical Bid containing commercial details;
- c. Revelation of Prices in any form or by any reason before opening the Commercial Bid;
- d. Failure to furnish all information required by the Tender Document or submission of a Bid not substantially responsive to the Tender Document in every respect;
- e. Bidders not quoting for the complete scope of work as indicated in the Tender Documents, addendum /corrigendum (if any) and any subsequent information given to the Bidder;
- f. Bidders not complying with the Technical and General Terms and conditions as stated in the Tender Documents;
- g. The Bidder not confirming unconditional acceptance of full responsibility of providing services in accordance with the scope of work and Service Level Agreements of this Tender;

Commercial Rejection Criteria

- a. Incomplete price Bid;
- b. Price Bids that do not conform to the Tender's price bid format;
- c. Total price quoted by the Bidder does not include all statutory taxes and levies applicable;
- d. If there is an arithmetic discrepancy in the commercial Bid calculations the Technical Committee shall rectify the same. If the Bidder does not accept the correction of the errors, its Bid may be rejected.
- 3. Misrepresentation/ improper response by the Bidder may lead to the disqualification. If such disqualification / rejection occurs after the Proposals have been opened and the highest ranking Bidder gets disqualified / rejected, then SSCDL reserves the right to consider the next best Bidder, or take any other measure as may be deemed fit in the sole discretion of SSCDL, including annulment of the Selection Process.

11.10 Bid Fee and Earnest Money Deposit (EMD) and amount

- 1. The bidder should pay non-refundable Bid Fee of Rs. 7,080/- [Rs. 6,000 + 18% GST] by Demand Draft or Banker's Cheque in favor of Surat Smart City Development Limited, from Nationalized or Scheduled Banks except Co-operative Banks, payable at Surat. The Bid fees shall be in the form of a Demand Draft / Banker's Cheque.
- 2. *GST Registration Number* for SURAT SMART CITY DEVELOPMENT LIMITED (SSCDL) is "24AAWCS9229G1ZR"
- 3. The bidder should pay EMD of Rs. 4,50,000 (Rupees Seventy-five lakhs only) in the form of Demand Draft or in the form of irrevocable Bank guarantee (BG) from any approved nationalized / scheduled banks with validity of 180 days from the date of Bid opening in favour of "Surat Smart City Development Limited". The list of approved bank is specified in Annexure VI. The details of the SSCDL bank is as below:

Name of Beneficiary:	Surat Smart City Development Ltd
Name of Bank:	State Bank of India
Bank address:	Nanpura, Surat Branch
Bank Account No:	35661186460
IFSC CODE:	SBIN0001388
MICR CODE:	395002004
BRANCH CODE:	1388

- 4. No interest will be payable by the SSCDL on the Earnest Money Deposit.
- 5. In case bid is submitted without EMD or Bid fees as mentioned above then SSCDL reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
- 6. The EMD of unsuccessful Bidders will be returned by the Authority, without any Interest, as promptly as possible on acceptance of the Proposal of the Selected Bidder or when the Authority cancels the Bidding Process.

- 7. The Selected Bidder's EMD will be returned, without any interest, upon the Selected Bidder signing the Agreement and furnishing the Security Deposit / Performance Guarantee in accordance with the provision thereof
- 8. The decision of SSCDL regarding forfeiture of the EMD and rejection of bid shall be final & shall not be called upon question under any circumstances.
- 9. The EMD may be forfeited:
 - a. If a Bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any; or
 - b. In the case of a successful bidder, if the Bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time
 - c. 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.
 - d. During the bid process, if any information found wrong / manipulated / hidden in the bid.

11.11 Sealing, Marking and Submission of Bids

Bidders are required to submit their bids in separate sealed envelopes as per instructions given below:

Part-1: BID FEES AND EMD (Online Scan copy on (n)procure & Original in hardcopy through Postal Speed Post or Registered Post AD only)

Part 1: Bid Fees and EMD with complete details and supporting documents as mentioned in Section 11.10 in "Envelop 1" super scribed with Tender No, Due Date and RFP Name -<<RFP Name>>

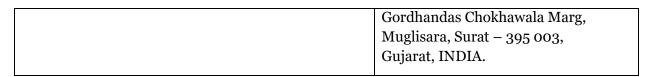
Bidder to submit the scan copy of Bid Fee and EMD on Online procurement portal as well as original hard copy as per the timeline mentioned in Notice Inviting Bid. Punitive action shall be initiated for non-submission of EMD & Tender fees in original in hard copy by bidder including abeyance of registration and cancellation of E-Tendering code for one year.

Part-2: TECHNICAL BID (Online Scan copy on (n)procure & in Hardcopy through Postal Speed Post or Registered Post AD only)

Part 2: Bidder's Eligibility Criteria, Technical Evaluation Criteria and **Technical proposal soft copy in Pen drive/ USB stick** with complete details as mentioned in Section 15.1 in "**Envelop 2**" super scribed with Tender No, Due Date and RFP Name —<<RFP Name>>. The proposal shall also consist with all supporting documents, RFP Copy, Addendum & Corrigendum, if any.

The large envelope / outer envelope containing above envelopes must be sealed and super scribed and shall be sent as under:

Details to be mentioned exactly on sealed envelop			
Tender Details To,			
• RFP No.:	The Chief Accountant,		
• << RFP Name >>	Surat Municipal Corporation,		
• Last date of Submission:	Mahanagar Seva Sadan,		



- 1. The Bid must be sent strictly by <u>Postal Speed Post or Registered Post AD only</u> so as to reach on or before as per notice inviting page. Bids received in any other manner or mode (like courier, in person, etc.) will not be considered. SSCDL won't be responsible for postal delays.
- 2. SSCDL will not accept submission of a proposal in any manner other than that specified in the document. Proposals submitted in any other manner shall be treated as defective, invalid and rejected.
- 3. If the envelopes are not sealed and marked as instructed above, the SSCDL assumes no responsibility for the misplacement or premature opening of the contents of the application and consequent losses, if any suffered by the Bidder.
- 4. Each Bidder shall submit only one proposal containing documents as below. A bidder who submits more than one proposal under this contract will be disqualified
- Original copy of the Bid fee & EMD
- Bidder's Eligibility criteria related documents
- Technical Eligibility criteria, Technical Proposal related documents including and Technical Compliance
- RFP Copy and Addenda & Corrigendum
- The Bidder shall prepare original set of the Application (together with originals /copies of documents required to be submitted along therewith pursuant to this document) and applicant shall also provide a soft copy on a Pen Drive / USB stick. In the event of any discrepancy between the original and Pen Drive/USB stick, the original shall prevail
- Each page of the above should bear the initials of the Applicant along with the seal of the Applicant in token of confirmation of having understood the contents. In case of consortium the bid will be signed by the Prime Bidder.
- 5. Bidder's Eligibility criteria documents and technical proposal should be signed by an authorized person of the bidder. The Technical proposal should be submitted along with a certified true copy of a board resolution/power of attorney empowering authorized signatory to sign/act/execute documents binding the bidder to the terms and conditions detailed in this proposal. In case of the Consortium the Prime bidder will submit this document.
- 6. Proposals must be direct, concise, and complete. SSCDL will evaluate bidder's proposal based on its clarity and completeness of its response to the requirements of the project as outlined in this RFP. The Chairman, SSCDL or Municipal Commissioner, SMC reserves the right to accept or reject any or all the proposals without assigning any reason.
- 7. Bidder to submit the Technical Bid documents on online procurement portal as well as in hard copy as per the timeline mentioned in Notice Inviting Bid. For document to be uploaded in online procurement portal, must be colored and scanned to be seen as original. Scanning in black and white or gray shall not be acceptable.

PART 3: Online PRICE BID (Online on (n)procure only)

8. The price bid must be submitted online on https://smc.nprocure.com. It should not be sent physically, if submitted physically the bid shall be rejected. Please refer Section 16 for format and instructions.

9. Bidders are required to submit the online price bid well in advance on (n)procure website. And representation from the bidder of non-submission of bid due to the (n)procure portal issue will not be entertained. In case bidder needs any clarification or if training required for participating in online tender, they can contact the following office: -

(n) Code solutions - A division GNFC Ltd.

403, GNFC Infotower, Bodakdev, Ahmedabad – 380 054, Gujarat (India)

Tel: +91 26857316/17/18 Fax: + 91 79 26857321

E-mail: nprocure@gnvfc.net Website: www.nprocure.com

Toll Free: 1800-233-1010 (Ext. 501 & 512)

For further particulars contact above office/ or visit on following websites:

www.nprocure.com ,
www.smc.nprocure.com

11.12 Language of Bids

- 1. The Bids prepared by the Bidder and all correspondence and documents relating to the bids exchanged by the Bidder and SMC, 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.
- 2. If any supporting documents submitted are in any language other than English, Notarized copy of the translation of the same in English language shall be submitted by the bidder.

11.13 Concessions permissible under statutes

Bidder, while quoting against this tender, must take cognizance of all concessions permissible, if any, under the statutes and ensure the same is passed on to SSCDL, failing which it will have to bear extra cost. In case Bidder does not avail concessional rates of levies like customs duty, excise duty, sales tax, etc. SSCDL will not take responsibility towards this. However, SSCDL may provide necessary assistance, wherever possible, in this regard.

11.14 Bid Validity

The proposal should be valid for acceptance for a minimum period of 180 days from the Bid Opening Date (the "Proposal Validity Period"). If required, Authority may request the bidder to have it extended for a further period. The request and the responses thereto shall be made in writing. A Bidder agreeing to the request will not be required or permitted to modify his Proposal but will be required to extend the validity of EMD for the period of the extension, and in compliance with Clause 11.10 in all respects.

11.15 Taxes

The Prices mentioned in the Price Bid should include all applicable taxes & duties as applicable. The L1 evaluation will be done exclusive of taxes only. If any duties are applicable to the product the same will be considered for L1 evaluation. The bidder to quote the duties along with the rate of products proposed for L1 evaluation.

However, the bidder is expected to provide the tax components in commercial bid. The payment of taxes to the selected bidder will be done as per the prevailing rate.

Further, SSCDL shall be entitled to deduct tax at source or any other Taxes/Cess as may be applicable.

GST

GST (Goods & Service Tax) has come in existence from 1st July, 2017. Contractor/Successful Bidder is bound to pay any amount GST prescribed by the Govt. of India as per the terms of Contract agreed upon during the course of execution of this Contract.

During the course of execution of Contract, if there is any change in Rate of GST (Goods & Service Tax) by the Government, the same shall be reimbursed/recovered separately by SSCDL, subject to the submission of Original Receipt/Proof for the amounts actually remitted by the Successful Tendered/Contractor to the Competent Authority along with a Certificate from Chartered Accountant of Contractor/Successful bidder certifying that the amount of GST paid to the Government and the same shall be intimated/submitted/claimed within 30 (Thirty) Days from the date of payment. Remittance of GST within stipulated period shall be the sole responsibility of the Successful bidder/contractor, failing which, SSCDL may recover the amount due, from any other payable dues with SSCDL and decision of SSCDL shall be final and binding on the Contractor/Successful Bidder in this regard. Further the non- payment of GST to the Government may lead to the termination of contract and forfeiture of Security Deposit/Performance Guarantee Amount.

If imposition of any other new Taxes/Duties/Levies/Cess or any other incidentals etc. or any increase in the existing Taxes/Duties/Levies/Cess or any other incidentals etc. (excluding GST) are imposed during the course of the contract, the same shall be borne by the Contractor/Successful Bidder Only, in no case SSCDL shall be liable for the same.

11.16 Firm Prices and Bid Currency

Prices quoted must be firm and final and shall not be subject to any upward modifications, on any account whatsoever. Prices shall be expressed in Indian Rupees (INR) only.

11.17 Right to vary the scope of the work at the time of award

SSCDL reserves its right to make changes to the scope of the work at the time of execution of the resultant Agreement. If any such change causes an increase or decrease in the cost of, or the time required for the SI's performance of any part of the work under the Agreement, whether changed or not changed by the order, an equitable adjustment (if required) shall be made in the Contract Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the SI for adjustment under this Clause must be asserted within thirty (30) days from the date of the SI's receipt of the SSCDL changed order.

11.18 Modification or Withdrawal of Bids

1. No bid may be withdrawn in the interval between the bid submission deadline and the expiration of the specified bid validity period. Withdrawal of a bid during this interval may result in the forfeiture of the Bidder's EMD.

11.19 Evaluation Process

- 1. A two-stage selection procedure will be adopted: Stage-1: Technical Bid (Basic Eligibility Criteria + Technical Compliance) and Stage-2: Commercial bid.
- 2. In the first stage SSCDL/SMC shall examine the statement of eligibility, experience, technical capabilities etc. furnished by the Bidder and select the bidders who satisfy the technical evaluation criteria
- 3. In the second stage, subsequent to technical evaluation stage, commercial bids of only shortlisted Bidders will be opened. It should be noted the bids shall be evaluated on the basis of price. However, if required SSCDL/SMC as per its own discretion may also consider other factors like technology, innovative solution, etc.
- 4. The Bidder must possess the technical know-how and the financial wherewithal that would be required to successfully provide the services sought by SSCDL, 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.
- 5. SSCDL will appoint a Bidder's Evaluation Committee (BEC) to scrutinize and evaluate the Bidder's Eligibility of bidders, 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. SSCDL may waive any informality or nonconformity in a Bid which does not constitute a material deviation according to SSCDL.
- 6. There should be no mention of bid prices in any part of the Bid other than the Commercial Bids.

11.20 Opening of Technical Bid

- 1. SSCDL shall open the Technical Bid in public, in the presence of Bidders' designated representatives and anyone who chooses to attend. The bidders shall be intimated the venue, date and time for bid opening.
- 2. The Technical Bids of Bidders shall be considered and will be evaluated as per the eligibility criteria mentioned in Section 10
- 3. Only bids that are opened and read out at the proposal opening and are accompanied with Original Copy of Bid Processing Fee and EMD shall be considered further.

11.21 Evaluation of Technical Bids

1. The Bidder must meet the eligibility criteria laid in this RFP and possess the technical know-how and the financial wherewithal that would be required to successfully provide the services sought by SSCDL, 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.
- 2. The bidder must make sure to provide all the relevant documents to support the claim made with regards to various evaluation criteria like turnover, net-worth, projects executed, etc. SSCDL will examine the Bids to determine whether they are complete, response and whether the Bid format confirms to the Bid Document requirements. SSCDL may waive any informality or nonconformity in a Bid which does not constitute a material deviation according to SSCDL.
- 3. There should be no mention of bid prices in any part of the Bid other than the Commercial Bids.
- 4. SMC/SSCDL may require written clarifications from the Bidders to clarify ambiguities and uncertainties arising out of the evaluation of the Bid.
- 5. The commercial bid of only those bidders shall be opened which meet all the criteria mentioned in Section 10 of this RFP & Fully complied in Technical Bid.

11.22 Opening of Commercial Bid

- 1. The Commercial bids shall not be opened by SSCDL until the evaluation of the Technical proposal has been completed.
- 2. SSCDL will open the Commercial Bids of those Bidders who qualified in the technical bid.
- 3. SSCDL will open the Commercial Bids in the presence of the nodal officer / designated representatives of the Bidder who choose to attend, at the time, date and place, as decided and communicated by SSCDL.
- 4. Commercial Bids from bidders who have failed to qualify in evaluation of the technical proposal will not be opened. Only bids that are opened and read out at the proposal opening shall be considered further

11.23 Evaluation of Commercial Bids and Selection Method

- 1. SSCDL will award the Contract to the Bidder based on **Least Cost Selection (LCS/L1)** method. No additional cost in any form will be entertained by SSCDL during the contract period. The L1 evaluation will be done exclusive of taxes. However, the bidder is expected to provide the tax components in commercials. The payment of taxes to the selected bidder will be done on actuals / prevailing rates. The L1 evaluation will be done exclusive of taxes only. If any duties are applicable to the product the same will be considered for L1 evaluation. The bidder to quote the duties along with the rate of products proposed for L1 evaluation.
 - Further, SSCDL shall be entitled to deduct tax at source, or any other taxes/ cess as may be applicable.
- 2. Total Estimated Commercial Bid of a bidder would be calculated based on quantities given in Section 16.3. The quantities in this table are estimated quantity and the actual quantity will be

determined at the time of project execution based on the Project inception report and actual requirements considering site situation.

- 3. The Commercial Bids of only the technically qualified bidders will be opened for evaluation.
- 4. The bidder achieving the L1 price will be invited for negotiations for awarding the contract. In case of a tie where two or more bidders achieve the same price, the bidder with higher turnover will be invited for negotiations and awarding of the contract.

Arithmetical errors: 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 the Bidder does not accept the correction of the errors, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail

11.24 Rights to Accept/Reject any or all Proposals

SSCDL 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 SSCDL's action.

11.25 Notifications of Award and Signing of Contract

- 1. Prior to the expiration of the period of proposal validity, the bidder will be notified in writing or by fax or email that its proposal has been accepted.
- 2. SSCDL shall facilitate signing of the contract within the period of 30 days of the notification of award. However, it is to be noted that the date of commencement of the project and all contractual obligations shall commence from the date of issuance of Purchase Order/Letter of Intent (LoI), whichever is earlier. All reference timelines as regards the execution of the project and the payments to the System Integrator shall be considered as beginning from the date of issuance of the Purchase Order/Letter of Acceptance, whichever is earlier.
- 3. The notification of award (LoI/Purchase Order) will constitute the formation of the Contract. Upon the Bidder's executing the contract with SSCDL, it will promptly notify each unsuccessful bidder and return their EMDs.
- 4. At the time SSCDL notifies the successful Bidder that its bid has been accepted, SSCDL will send the Bidders the Pro forma for Contract, incorporating all clauses/agreements between the parties. Within 15 days of receipt of the Contract, the successful Bidder shall sign and date the Contract with SSCDL. Draft Format of the contract is given in the Annexure III.
- 5. Necessary Tri-Party Agreement & Four-Party Agreement will be executed between SMC, SSCDL, System Integrator and Sitilink (End -User) as per the administrative process defined by the Authority.

11.26Quantity Variation

- 1. The quantity defined in the RFP are estimated and the actual quantity will be executed based on the survey by the selected bidder at the time of project implementation. The quoted rate will remain firm and same for such variation in quantity.
- 2. The variation in individual item of quantities permitted, provided it shall not exceed \pm 30% in individual item. The successful bidder shall not object to the upward or downward variation in quantities of any item within the variation limits.
- 3. The payment will be made as per actual executed Quantity as per tender rates for entire duration of contract.
- 4. Quantities mentioned in the commercial formats are indicative in number. SMC/SSCDL at its discretion may or may not procure the listed components in mentioned quantities at the time of placing order / agreement. SSCDL has the rights to delete any of the component before final implementation. The successful bidder shall not object to the upward or downward variation in quantities of any item.
- 5. If required additional quantity over and above may be executed on later stage, the payment for such additional quantities shall be made at tender rates and the tender rates shall be valid for 5 years.
- 6. No claim shall be entertained or become payable for price variation of additional quantities.

11.27 Performance Bank Guarantee

- 1. The successful bidder shall at his own expense, deposit with department, within 10 days of the notification of award (done through issuance of the Purchase Order/Letter of Acceptance), an unconditional and irrevocable Performance Bank Guarantee (PBG) from a list of approved banks as per the format given in this Bid Document, in favor of Surat Smart City Development Ltd for the due performance and fulfilment of the contract by the bidder. Failing which a penalty @ 0.065% of the amount of PBG will be imposed for delay of each day.
- 2. This Performance Bank Guarantee will be for an amount equivalent to 3% of contract value. All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.
- 3. The successful bidder shall maintain a valid and binding Performance Guarantee for a period of six months after the expiry of the Contract Period ("Validity Period"). In case if Performance Bank Guarantee expired before the above-mentioned validity period. SI has to renew Performance Bank Guarantee before 30 days from the expiry date of the same. Failing which a penalty @ 0.065% of the amount of PBG will be imposed for delay of each day.
- 4. The Performance Bank Guarantee letter format can be found in the Annexure V of this document.

- 5. 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.
- 6. If the Bidder, fails to furnish the Performance Guarantee, it shall be lawful for the Authority to forfeit the EMD or cancel the contract or any part thereof.
- 7. 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.
- 8. 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.
- 9. Under this contract, wherever the contractor is required to submit F.D.R., bank guarantee, etc. against payment towards any deposit or advance e.g., EMD, SD, etc. Such F.D.R, bank guarantees, etc. shall be produced from any one of the approved bank as defined in Annexure-VI. During the contract period if the bank from which the PBG is submitted is removed from the list of approved bank, the selected bidder shall be required to replace the PBG and submit the PBG from the approved bank. The notification in this regard will be given to the selected bidder by SMC/SSCDL and the same must be complied within 21 days of such notification

11.28Governing Law

The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Surat shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.

11.29Other General Criteria

- 1. 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 bid separately under different names for the same contract. An independence form in the same regard must be submitted by the bidder.
- 2. If it is found that the same firm has submitted multiple bids under different names for the proposed contract, all such tender(s) shall stand rejected and bid deposit of each such firm/establishment shall be forfeited. In addition, such firms/establishments shall be liable, at the discretion of the Chief Executive Officer/ Municipal Commissioner, for further penal action including blacklisting.

- 3. 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 further penal action including blacklisting.
- 4. If after awarding the contract it is found that the accepted bid 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.

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

Failure of the bidder 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.

11.31 Terms and Conditions of the Tender

- 1. Bidder is required to refer to the draft Contract Agreement, attached as Annexure III in this Bid Document, for all the terms and conditions (including project timeline
- 2. s) to be adhered by the successful bidder during Project Implementation and Post implementation period.
- 3. The extension can be decided in future depending on the satisfactory performance of the bidder by competent authority, future IT Infrastructure expansion needs and sole discretion of SSCDL/SMC.
- 4. Please note that one needs to read the Contract Agreement as a whole document; and the Annexure III mentioned there-in may not correspond to the Bid Document Annexure. Please refer to the Interpretation Section of the Draft/Master Service Agreement.
- 5. Please note that authority has rights to conclude the contract agreement anytime during the operation & maintenance phase. Prior to closure of the contract authority will provide written notice of 30 days for necessary handover formalities to the authority.

11.32 Restriction on Transfer of Agreement

The System Integrator shall not assign or transfer its right in any manner whatsoever under this agreement to a third party or enter into any agreement for sub-contracting and/or partnership relating to any subject matter to the agreement to any third party or any sister-concerned firm within a group either in whole or in any part i.e., partnership/third party interest shall be created.

11.33 Safety Regulation, Accident and Damage

The Bidder shall be responsible at his own cost in and relative to performance of the work and bidder to observe and to ensure observance by his Sub-contractors, agents and servants of the provisions of Safety Code as hereinafter appearing and all fire, Safety and security regulations as may be prescribed by the Owner from time to time and such other Precautions, measures as shall be necessary and shall employ / deploy all equipment necessary to protect all works, materials, properties, structures, equipment's, installations, communications and facilities whatsoever from damage, loss or other hazard whatsoever (including but not limited to fire and explosion) and shall during construction and other operations minimize the disturbance and inconvenience to the Owner, other bidders, the public and adjoining land and property owners and occupiers, and crops, trees and vegetation and shall indemnify and keep indemnified the One from and against all losses and damages and costs, charges and expenses and penalties, actions, claims, demands and proceedings whatsoever suffered or incurred by or against the Owner, as the case may be, virtue of any loss, alteration, displacement, disturbance or destruction or accident to any works materials, properties, structures, equipment, installations communications and facilities and land and property owners and occupiers and crops, trees and vegetation as aforesaid, with the intent that the Bidder shall be exclusively responsible for any accident, loss, damage, alteration, displacement, disturbance or destruction as aforesaid resultant directly or indirectly from any breach by the Bidder of his obligation aforesaid or upon any operation, act or omission of the bidder his Sub-contractor(s) or agent(s) or servant(s).

The Bidder's liabilities under the Contract shall remain unimpaired notwithstanding the existence of any storage cum erection or other insurance covering any risk, damage, loss or liability for which the Bidder is liable to the Owner in terms of the foregoing Sub-Clause or otherwise and / or in respect of which the Bidder has indemnified the Owner with the intent that notwithstanding the existence of such insurance, the Bidder shall be and remain fully liable for all liabilities and obligations under the contract and indemnified to the Owner, and the Owner shall not be obliged to seek recourse under such policy(ies) in preference to recourse against the Bidder or otherwise to exhaust any other remedy in preference to the remedies available to in under the Contract prior written approval of SSCDL. However, even if the work is sub-contracted / outsourced, the sole responsibility of the work shall lie with the SI. The SI shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the sub-contracting agreements (if any) between both the parties would be required to be submitted to SSCDL.

11.340wnership and Licenses

The ownership of all hardware/software developed/customized/ configured/ procured as part of the project and related documentation for the project would always lie with the SSCDL/SMC. All licenses for software procured related to project have to be in the name of **Surat Municipal Corporation**. The bidder will be required to produce the Licenses/ATS/Warranty and other documents from the respective OEMs clearly mentioning the product name, quantity, duration, type of support, etc. The payment for the respective item will be subject to submission of the aforesaid documents to SMC/SSCDL.

11.35 OEM Support

- 1. Bidders are required to specify only one make and model of each item and provide the details in the Technical bid. In any case multiple make and model for single item/component is not allowed.
- 2. The bidder will be required to submit a manufacturer's authorization form in original or notarized copy from all the OEMs stating that the bidder in concern would be bidding for their products/solutions.
- 3. Bidder to ensure that the proposed OEM(s) are based on criteria mentioned in Section 10.2
- 4. The bidder should have a back-to-back support from OEMs on the EMS & BI Software & proposed compute hardware for 5 years. Any upgrade and updates of software for the next 5 years shall be made available by the bidder without any additional cost.
- 5. The relevant product information, brand and model number offered, printed product brochure, technical specification sheets, datasheets etc. should be submitted along with the bid. Failure to submit this information along with the bid shall results in disqualification.
- 6. The bidder shall furnish undertaking confirming compliance to technical specifications and complete functional requirements as stated in the bid document for all equipment proposed from OEMs. Please refer to Section 6,7, and 8 for Functional and Technical specifications.
- 7. The bidder shall also furnish the undertaking from their OEM confirming compliance to technical specifications and complete functional requirements as stated in the bid document. Please refer to Section 6,7, and 8 for Functional and Technical specifications.
- 8. The bidder must not bid/supply any equipment that is likely to be declared end of sale within one year from the date of supply. The successful bidder would be required to replace all such equipment with latest and at least of equivalent configuration. The successful bidder shall submit an undertaking from OEM in this regard to the SSCDL/SMC.

11.36General Clause related to Any Bidders/ Sub-Contractor from a Country which shares a Land Border with India

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority (Registration committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)).
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" means:
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or

- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or
- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
 - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
 - a. Explanation-
 - b. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - c. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 - 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 - 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 - 4. Where no natural person is identified under i or ii or iii above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 - 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority (Registration committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)).

12 Project Schedule and Payment Timelines

- 1. SMC / SSCDL shall issue a "Work Order(WO)" in writing, indicating the number of units of Hardware and Software to be supplied under this Project. Upon getting the Work Order, the selected bidder shall promptly supply, install and commission the hardware and software as soon as possible within the lead time specified in the Work order. The delay in delivery will attract delayed penalty as mentioned in this RFP.
- 2. Project Timeline for Work Order & Payment Terms shall be as per below:

T = Date of Work Order

#	Milestones	Deliverables	Timeline	Payment Terms
1.	Requirement Gathering & Integration Road Map	• Integration Road Map Document	T + 15 days	-
2.	Satisfactory delivery and acceptance of materials, and Software licenses (as per the Work Order).	 Delivery Challan Material inspection sign- off report (Sign- off from client is mandatory) 	T + 30 days	20% of total CAPEX of Work Order (CAPEX of Delivered Components)
3.	Satisfactory competition of Installation & integration of materials, and Software licenses along with Gap Analysis	 Installation and Commissioning Sign-off report Closure of observation report, if any Gap Analysis Report 	T + 90 days	30% of total CAPEX of Work order (CAPEX of Installed Components)
4.	Satisfactory competition of UAT and Go Live of entire Work Order (Testing and Commissioning)	 Testing & UAT Report Go-Live certificate from client Submission of Standard Operating Procedure (SOPs) 	T1 = T + 120 days	40 % of total CAPEX of Work order (CAPEX of UAT of Go Live completed components)
5.	Successful completion of Operation and Maintenance for 1 st Quarter post issuance of Go-Live	SLA report	T1 + 90 days	10% of total CAPEX of Work order (CAPEX of Go Live Components/ Solutions)
6.	Operation Expense (OPEX) Payment shall be paid in 20 Quarterly installments	• Quarterly SLA report	T1 + 5 years	Total OPEX in 20 equal instalments for five years after successful Project UAT and Go Live of "Work Order"

- i. The payments are subject to meeting of SLA's failing which the appropriate deductions as per RFP will be made applicable.
- ii. Payment of Operations and maintenance phase will be made on quarterly basis (at completion of each quarter) based on the adherence to SLA, for the amount quoted for each respective year. The Operational cost will be payable for those items which are in working condition / operational

13 Service Level Agreements (SLA)

Service Level Agreement (SLA) shall become the part of Agreement between SMC/SSCDL and the Successful Bidder. SLA defines the terms of the Successful Bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section. The Successful Bidder has to comply with Service Levels requirements to ensure adherence to Project timelines, quality and availability of services.

As a part of project, the Successful Bidder (refer as System Integrator, SI) has to make provisions in the supplied EMS software to monitor all the SLAs mentioned in AFCS project RFP as well as this RFP.

Note: Penalties shall not be levied on the Successful Bidder in the following cases:

- 1. There is a Force Majeure event effecting the SLA's which is beyond the control of the Successful Bidder
- 2. The non-compliance to the SLA's due to reasons beyond the control of the Bidder.
- 3. Theft cases, Damages due to any accident / mishap shall be considered as "beyond the control of Bidder", but the SI shall need to repair/ replace the equipment or shall provide the equipment within 15 days of the incident and should made the system operational.

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the System Integrator to SSCDL for the duration of this Agreement.

13.1 Definitions

For the purposes of this service level agreement, the definitions and terms are specified in the contract along with the following terms shall have the meanings set forth below:

- 1. "Uptime" shall mean the time period for the specified services / components with the specified technical service standards are available to the user department. Uptime, in percentage, of any component (Non-IT & IT) can be calculated as:
 - a. Uptime = {1- [(Downtime) / (Total Time Maintenance Time)]} * 100%
- 2. "Downtime" shall mean the time period for which the specified services / components with specified technical and service standards are not available to the user department and excludes downtime owing to Force Majeure & Reasons beyond control of SI.
- 3. "Incident" refers to any event / abnormalities in the functioning of the Services specified as part of the Scope of Work of the Systems Integrator that may lead to disruption in normal operations of the System.
- 4. "Resolution Time" shall mean the time taken (after the incident has been reported at the helpdesk), in resolving (diagnosing, troubleshooting and fixing) or escalating (to the second level or to respective vendors, getting the confirmatory details about the same from the vendor

- and conveying the same to the end user), the services related troubles during the first level escalation.
- 5. "Schedule Downtime" shall means the aggregate number of hours in any month during which each equipment, is down during total Hours, due to preventive maintenance, scheduled maintenance, infrastructure problems or any other situation post written approval of the authority.

13.2 Measurement of SLA

The SLA metrics provided specifies performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on monthly basis. Payment to the SI is linked to the compliance with the SLA metrics.

The aforementioned SLA parameters shall be measured as per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SI and audited by SMC/SSCDL or its appointed Consultant for accuracy and reliability.

SMC/SSCDL shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters/ penalty. The SLAs defined, shall be reviewed by SMC/SSCDL on an annual basis after consulting the SI, Project Management Consultants and other experts. All the changes would be made by SMC/SSCDL after consultation with the SI and might include some corrections to reduce undue relaxation in Service levels or some corrections to avoid unrealistic imposition of liquidated damages/ penalties, which are noticed after project has gone live.

Total liquidated damages to be levied on the SI shall be capped at 10% of the total contract value. However, SMC/SSCDL would have right to invoke termination of the contract in case the overall liquidated damages equal 10% of total contract value.

If in case during the O&M phase of the project, some of the sub-component's data is unavailable / sub system is inactive, the calculation of the SLA shall be carried out on a pro-rata basis for all the available sub-systems.

13.3 SLAs

#	Performance Area	SLA	Penalty
Proje	ct Implementation SLA		
1	Delay in Delivery of Project scope	As per RFP	Any delay in the delivery of the project milestones (As mentioned in section 12) (solely attributable to vendor/ SI) would attract a penalty of 0.2% per day of the CAPEX value of that particular item.

#	Performance Area	SLA	Penalty
			Total penalty applicable
			under this clause shall be
			limited to 10% of the value of
			the equipment/ device/
			Software in software or hardware to be supplied,
			installed and commissioned
			for which Work Order is
			placed
			If the penalty reaches 10% of
			the total contract value,
			Authority may invoke
Do at 1	[marilam archation CI A		termination clause.
Post I	mplementation SLA DC Hardware Component Availability:	>=99.50%	
1	"Availability of DC Hardware	7-99.50%	No Penalty
	Components" means availability of the	<99.50% to	Penalty of 0.1% of purchase
	Equipment/ devices data to the Command Centre	>=97%	cost for that particular
	Command Centre	< 97%	equipment Penalty of X*0.1% of purchase
	Uptime (%) = [Total minutes in a	1 9//0	cost for that particular
	month – Planned downtime – Total		equipment
	down time(min) in a month]*100/[Total minutes in a month - Planned		
	downtime		
	X= [100-(uptime value)]/2		
2	EMS & BI Application	>= 99.50%	No Penalty
	Availability: Application availability	<00.50% +a	,
	refers to the total time when the Application is available to the users for	<99.50% to >=97%	Penalty of 2% of Quarterly
	performing all activities and tasks.	7 7/10	Payment of that particular
	performing an activities and tasks.		Application
	Uptime (%) = [Total minutes in a	< 97.00%	Penalty of X*2% of Quarterly
	month-Planned Application		Payment of that particular
	downtime – Total Application down time(min) in a month]*100/[Total		Application
	minutes in a month - Planned		
	Application downtime]		
	X= [100-(uptime value)]/2		

Note:

- 1. The performance report for all above shall be generated from the Measurement Tool (EMS, Helpdesk tool, etc.). SI shall submit the monthly Reports on the performance and adherence to the SLA through these tools. All incidences reported by EMS and all tickets registered in Helpdesk should be part of the performance report.
- 2. Following will not be considered for downtime calculation

- a. Equipment down due to power failure at Location or due to loss of network connectivity attributable to SMC/SSCDL.
- b. Schedule maintenance by SI with prior information to SSCDL/SMC.
- 3. The payment shall be made on quarterly basis on completion of respective quarter.

13.4 Security Breach SLA

Note – This SLA for Security Breach is applicable over and above the SLAs mentioned in above table.

Definition	Security of the overall EMS & BI application is very important and Successful Bidder shall be required to ensure no compromise on the same. Security Breach types considered for this SLA are — a. Availability of access of EMS & BI application or data to any user other than those authorized by SSCDL/SMC/End user department and provided passwords b. Any incidence that violates security policy resulting in, unauthorised access to system/data, denial of service/disruption, etc. c. Successful hacking on system by any unauthorized user or any other privacy rule is broken as per Govt. of India guidelines d. Any other security breach which can compromise the system uptime/accuracy/privacy, etc.	
Service Level Requirement	Security compliance of the system should be 100%. There would be zero tolerance policy against such breaches	
Measurement of Level Service Parameter	Any reported security breach shall be logged into the SLA Management solution as a security breach and same should be resolved under 1st Priority.	
Penalty for non- achievement of SLA Requirement	For every security breach reported and proved, there shall be a penalty of INR 1,00,000/-	

13.5 SLA for Breach in Replacement of Technical Manpower

Note – This SLA for supply of Technical Manpower is applicable over and above the SLAs mentioned in the above table.

	per scope of work specified in this RFP. The current SLA breach shall specify penalty amount for non-availability of these man-power.		
Service Level	Availability of the required man-power should be 100%. SI to implement the biometric attendance system/mobile application based attendance and share the attendance report of each person proposed as part of team on monthly basis with SSCDL.		
Requirement	Note: Project team shall be required to take the approval from the SSCDL or concerned authority. The penalty shall be waived off for those approved leaves. In case of absence of approval, the penalty shall be levied.		
Measurement of Service Level Parameter	 Following instances would be considered as SLA non-compliances: Replacement of a profile by the bidder within one year Non-Deployment of the profile for more than 1 month if purchaser has asked SI for replacement (With equal or higher qualification and experience) due to non-performance Note: Replacement due to reasons not in control of SI (like resignation of the resource, accident, etc.) would not be counted in the permissible 1 replacement. 		
Penalty for non-	For every SLA non-compliance reported and proved, there shall be a penalty as given below: Team Member Penalty Project Manager Rs. 2,50,000/- Technical Expert Rs. 1,50,000/-		
achievement of SLA			
Requirement SLA			
1			

13.6 SLA for Breach in provisioning of Technical Manpower

Note – This SLA for supply of Technical Manpower is applicable over and above the SLAs mentioned in the above table.

Definition	Bidder is required to propose the CVs of the required technical manpower as mentioned in section 5.7. It is vital that such manpower is available to SSCDL/SMC/End user department onsite and performs as per scope of work specified in this RFP. The current SLA breach shall specify penaltramount for non-availability of these man-power.	
Service Level Requirement	Availability of the required man-power should be 100%. SI to implement the biometric attendance system/mobile application based attendance and share the attendance report of each person proposed as part of team on monthly basis with SSCDL. Note: Project team shall require to take the approval from the SSCDL or concerned authority. The penalty shall be waived off for those	

	approved leaves. In case of absence of approval, the penalty shall be levied.		
Measurement of Service Level Parameter	 Following instances would be considered as SLA non-compliances: Non- availability of proposed manpower as proposed by Bidder in Technical proposal. Availability of manpower which do not meet the min required qualification. 		
Penalty for non- achievement of SLA Requirement	For every SLA non-compliance in penalty as given below: Team Member Project Manager Technical Expert	Penalty Penalty Penalty of Rs. 3,000 per day of non-availability for 7 days at project site Penalty of Rs. 7,000 per day of non-availability after 7 days at project site Penalty of Rs 1,500 per day of non-availability for 7 days at Project site Penalty of Rs. 3,000 per day of non-availability after 7 days at Project site Penalty of Rs. 3,000 per day of non-availability after 7 days at Project site	

14 General Instructions on Preparation of Technical Proposal

- Bidders have to submit a very structured and organized technical bid, which will be analysed by the SSCDL/SMC for different compliances with regards to the requirements of the project. The document submitted must be searchable and well indexed without any handwritten material. The quality and completeness of the information submitted by the Bidder will matter a lot. All the documents must be submitted in one file only.
- 2. Bidder is expected to divide its Bid in following sections / documents:

a. Bidder's Competence to execute the project

- i. This document should bring about the capability of the firm to execute this project. Bidder shall submit the supporting documents as per requirement mentioned in Bidder's Eligibility Criteria.
- **b. Technical Proposal:** Bidders have to submit a structured and organized technical proposal, which will be analysed by SSCDL/SMC for different compliances with regards to the requirements of the project. Each point listed below must be provided in detail with the necessary supporting documents and assumptions. Information to be included by the bidders in their Technical Proposal is as follows:
 - i. Understanding of the Project Scope
 - ii. Solution Architecture
- iii. Approach & Methodology for design, Supply, Installation, Commissioning, Go live and comprehensive onsite warranty and O&M support for 5 Years.
- iv. Approach and Methodology for Management of SLA Requirements specified in the bid. Bidder is required to clearly articulate how the SLA requirements would be adhered.
- v. Detailed Project Plan with timelines, resource allocation, milestones etc. for supply, installation, Testing and commissioning of the various project components.
- vi. Risk Mitigation plan

c. Other Details

- i. **Bill of Material:** Bidder should give details of all the proposed IT and non IT components without specifying the costs (Unpriced BoQ). Please note that the bid shall get disqualified if Bidder gives price details in the technical document.
- ii. Make and Model of all Components as part of Unpriced BoQ. The make and model for all proposed components must unique.
- iii. **Compliance to Technical and Functional Specifications from the Bidder:**The bidder is required to provide the Compliance to functional and Technical Specifications for all the items as mentioned in c on Bidder's letterhead dully signed and stamped from authorized signatory in original or notarized
- iv. **Compliance to Technical and Functional Specifications from OEM:** The bidder must provide the Compliance to Technical and Functional Specifications for all the items as mentioned in Section 6,7, and 8 for Functional and Technical specifications,

- from respective OEMs on the OEM's letterhead duly signed by stamped from OEM in original or notarized.
- v. **Authorization letter from OEM**: The bidder must submit the authorisation from the OEM as per the format mentioned in TQ_10.
- vi. **Datasheets:** The bidders must submit the Datasheets highlighting the Technical Specification and parameters for all the components mentioned in Section 6,7, and 8 so as to derive the technical compliance of the proposed product with the technical specifications of the RFP.

15 Formats for Technical Bid

15.1 Checklist Technical-Qualification Document

#	Documents to be submitted	Submitted (Y/N)	Documentary Proof (Page No.)
1.	Bid fee of Rs. 7,080 [Rs. 6,000 + 18% GST] by Demand Draft or Banker's Cheque		
2.	EMD of Rs 4,50,000 /- as per Section 11.10		
3.	Pre- Qualification and Technical Bid Covering Letter (Form TQ_1)		
4.	Particulars/Information of the Bidder (Form TQ_2)		
5.	Copy of Certificate of Incorporation/Registration Certificate (In case of Consortium all members to submit)		
6.	Details of Annual Turnover and Net-worth for last three financial years (Form TQ_3)		
7.	Certificate from the Statutory auditor / CA clearly specifying the annual turnover and Net-worth for the specified years (Form TQ_4).		
8.	Declaration letter that the firm is not blacklisted by any Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of India/Any Government Agency in India as on the date of bid submission., in the format given in the RFP(Form TQ_5). In case of consortium, all members to submit.		
9.	Affidavit on Non-judicial Rs 300 stamp paper (Form TQ_6). In case of consortium, all members to submit.		
10.	Details of the projects executed (Form TQ_7)		
11.	Copy of Audited Balance Sheet for last three financial years. In case of consortium, all members to submit.		
12.	Copy of the audited Profit & Loss Statements for last three financial years. In case of consortium, all members to submit.		
13.	Copy of GST registration. In case of consortium, all members to submit.		
14.	Copy of PAN registration. In case of consortium, all members to submit.		
15.	Valid Solvency Certificate amounting minimum 20% of the consideration of the Contract from a scheduled /		

#	Documents to be submitted	Submitted (Y/N)	Documentary Proof (Page No.)
	nationalized bank from Sole / Prime Bidder (In case of consortium)		
16.	Copy of work orders and client certificate for Bidder's Eligibility Criteria		
17.	Power of attorney / board resolution to the authorized Signatory of the RFP (Form TQ_8) (in case of consortium, all members to submit)		
18.	Power of Attorney for Prime Bidder of Consortium (Form TQ_9)		
19.	Consortium Agreement with clear defining roles and responsibilities of each consortium partner		
20.	Authorization Letters from OEMs (Form TQ_10)		
21.	Bidder's Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020 (Form TQ_11)		
22.	OEM's Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020 (Form TQ_12)		
23.	Unpriced BOQ including Make & Model of all IT as well as non-IT components		
24.	Bidder's Total Responsibility Certificate (Form TQ_13)		
25.	Bidder's Compliance to Technical and Functional Specifications as mentioned in Section 6,7, and 8		
26.	OEM's Compliance to Technical and Functional Specifications as mentioned in Section 6,7, and 8		
27.	Datasheets highlighting the Technical Specification (Section 6,7, and 8) parameters in each datasheet for compliances		
28.	Supporting document for OEM Selection Criteria as per Section 10.2		
29.	Technical Proposal as mentioned in Section 14		
30.	Signed & Stamped RFP & Sub Sequent Addendum & Corrigenda Document		

Note:

1. All technical bid document(s)/ details should be duly sealed & signed as required.

- 2. In case of the deviation in the authorization letter by the manufacturer & forwarding letter; the price bid of such bidder will not be opened.
- 3. Any conditional mention regarding any technical details or prices in any document(s)/ forwarding letter; price bid of such bidder will not be opened.
- 4. Bidder has to submit the Bidder's Compliance (Original or Notarized), OEM's Compliance and TQ_10 for all the proposed components. All the documents should be in Original or Notarized.
- 5. Bidder has to submit the Bidder's Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020 (Form TQ_11) for all the proposed components. All the documents should be in Original or Notarized.
- 6. Bidder has to submit the OEM's Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020 (Form TQ_12) for all the proposed components. All the documents should be in Original or Notarized.

15.2 TQ_1: Pre-Qualification and Technical Bid Cover Letter

<<To be printed on lead bidder company's letterhead and signed by Authorized signatory>>

Date: dd/mm/yyyy

To, General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India.

Subject: Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

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

Dear Sir/Madam,

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 "Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation". We attach hereto our responses to Pre-Qualification, Technical-Qualification & 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 Surat Smart City Development Limited, 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 SSCDL in its shortlisting 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 / addendum & corrigendum, if any) document and also agree to abide by this tender response for a period of 180 days from the Bid Opening date. 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 :

15.3 TQ_2: Bidder Information Format

<<To be printed on prime bidder company's letterhead and signed by Authorized signatory>>

To whomsoever it may concern,

Bidder information Format

Please find below the details of lead bidder and other consortium members for participation in "Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation"

#	Particulars	Prime/Lead bidder (Consortium Member #1)	Consortium Member #2
1.	Name of the organization		
2.	Type of Organization (Pvt. Ltd/ Public Limited)		
3.	Country of registered Office		
4.	Address of Registered office		
5.	Company Registration Details		
6.	Date of Registration		
7.	PAN No.		
8.	GST Registration No.		
9.	Address of Registered office in India		
10.	No of years of operations in India		
11.	Authorized Signatory Name		
12.	Authorized Signatory Designation		
13.	Authorized Signatory Contact Details		
14.	Authorized Signatory Email ID		

Yours Sincerely,

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

Note: To be submitted with any other supporting details specified as Document Proof in Section 10.1 and 15.1

15.4 TQ_3: Bidder's Annual turnover over last 3 financial years

<<To be printed on bidder company's letterhead and signed by Authorized signatory. In case of Consortium all members are required to submit>>

Date: dd/mm/yyyy

To

General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India

Subject: Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

Sir/ Madam,

I have carefully gone through the Terms & Conditions contained in the RFP Document for Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation.

I hereby declare that below are the details regarding Overall turnover over last 3 financial years for our organization

#	Details	FY 2019- 2020 (in Crores) (i)	FY 2020-2021 (in Crores) (ii)	FY 2021-22 (in Crores) (iii)	Average Turnover [(i)+(ii)+(iii)/3]
1	Overall Annual Turnover				

Contact Details of officials for future correspondence regarding the bid process:

Details	Authorized Signatory	Secondary Contact
Name		
Title		
Company Address		
Mobile		
Fax		
Email Id		

I further certify that I am competent officer in my company to make this declaration.

Yours Sincerely,

Signature of Authorized Signatory (with official seal)

Name :
Designation :
Address :
Telephone& Fax :
E-mail address :

Note:

To be submitted with any other supporting details specified as Document Proof in Section 10.1 and 15.1

If FY 2021-22 Financial Statements of any bidder is unaudited then the Audited Financial Statements of 2018-19 along with an undertaking letter from the bidder that the 2021-22 Statements are not audited is to be submitted.

15.5 TQ_4: Auditor's/CA Certificate for turnover & Net-worth of bidder

<<To be printed on CA/Auditors company's letterhead and signed by Authorized signatory. In case of Consortium all members are required to submit >>

Date: dd/mm/yyyy

This is to certify that the Annual Turnover from ICT and Net-worth as per books and records of ______ for the following financial years are as under.

#	Financial Year Ending	Annual Turnover (INR)	Net-worth
1.	31st March, 2020		
2.	31st March, 2021		
3.	31st March, 2022		
	Average Turnover		

I further certify that I am competent officer in my company to make this declaration.

Yours Sincerely,

Signature of Auditor/CA (with official seal)

Name :

Designation : Address : Telephone& Fax : E-mail address :

Note:

If FY 2021-22 Financial Statements of any bidder is unaudited then the Audited Financial Statements of 2018-19 along with an undertaking letter from the bidder that the 2021-22 Statements are not audited is to be submitted.

15.6 TQ_5: Self-Declaration – No Blacklisting

<< To be printed on non-judicial stamp paper of Rs. 300 (duly notarized) by bidder (or each member of consortium, in case of consortium)

Date: dd/mm/yyyy To General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India. Sir/Madam, In response to the Tender Ref. No. dated for Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation, an owner/ partner/ Director , I/ We hereby declare that presently our Company/ firm is having unblemished record and is not declared ineligible for corrupt and fraudulent practices either indefinitely or for a particular period of time by any Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of India/Any Government Agency in India as on the date of bid submission. We further declare that presently our Company/ firm is not blacklisted and not declared ineligible for reasons other than corrupt and fraudulent practices by any Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of India/Any Government Agency in India as on the date of bid submission. If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/our security may be forfeited in full and the tender if any to the extent accepted may be cancelled. Name of the Bidder **Authorized Signatory** Seal of the Organization **Business Address** Date Place

15.7 TQ_6: Affidavit

The affidavit format as indicated below to be furnished on non-judicial stamp paper of Rs. 300 (duly notarized) by bidder (or each member of consortium, in case of consortium)

Name of work: Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

- I, the undersigned, do hereby certify that all the statements made in the required attachments re true and correct. I also understand that in case of wrongful / false information, Surat Smart City Development Ltd (SSCDL) is entitled to take any civil and criminal punitive action against me/us.
- The undersigned also hereby certifies that neither our firm M/s.______ nor any of its constituents partners have abandoned any work in India nor any contract awarded to us for such works has been rescinded during last five years, from the date of this bid submission. I hereby certify that presently our company is not blacklisted or debarred by any Government /PSU on the date of Bid Submission.
- The undersigned hereby authorize(s) and request(s) any bank, person, authorities, government or public limited institutions, firm or corporation to furnish pertinent information deemed necessary and requested by the SSCDL/SMC to verify our statements or our competence and general reputation.

The undersigned hereby declares that I have read clause regarding restriction on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries.

I certify that M/s << name of Company>> is not from such a country.

OR

I certify that M/s << name of Company>> belongs to such a country and has been registered with the Competent Authority (i.e. Registration committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)) and the copy of valid registration from competent authority has been attached in this regard.

I on behalf of $M/s \ll n$ are of Company >> further undertake that we will not subcontract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.

I hereby certify that M/s <<name of Company>> fulfils all requirements in this regard and is eligible to be considered.

- The undersigned understands and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the SSCDL/SMC.
- We hereby confirm that all the components/parts/assembly which we shall supply on award of
 contract shall be original new components /parts/assembly/software from respective OEMs of
 the products and that no refurbished/duplicate/ second hand components/parts/ assembly
 shall be used.

• The SMC/SSCDL and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this bid and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Affidavit will also serve as authorization to any individual or authorized representative to any institution referred to in the supporting information to provide such information deemed necessary and requested by you to verify statements and information provided in the RFP or with regard to the resources, experience and competence of the Applicant.

My/our offer shall not be considered in case of fake/ forged document(s) found during verification at any stage or at any stage of contract. I/ We are agreed to whatever action (s) taken by competent authority of corporation in the aforesaid circumstances such as forfeiture of security deposit and debarring from participation in future tenders for the period/ years as deemed fit by the corporation and informing the same to all other state/ central level Government/ semi government organizations.

Name of the Bidder :
Authorized Signatory :
Seal of the Organization :
Business Address :
Date :
Place :

15.8 TQ_7: Details of Experience

<< To be printed on bidders' company's letterhead and signed by Authorized signatory >>

Date: dd/mm/yyyy

To General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India.

Sir/Madam,

I have carefully gone through the Terms & Conditions contained in the RFP Document for "Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation".

I hereby declare that below are the details regarding relevant work that has been taken up by our company.

	Bidder				
Name of the Project	Project	Project	Project	_	Project
	1	2	3		n
General Information					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
Project Details					
Description of the project					
Scope of work of the Bidder					
Deliverables of the Bidder					
Outcomes of the project					
Other Details					
Total cost of the project					
Total cost of the services provided by the					
Bidder					
Duration of the project (number of months,					
start date, completion date, current status)					
Number of equipment's for which EMS					
system implemented					
Business Intelligence Software Implemented					
for Public Transport Organization (Yes/No)					
Mandatory Supporting Documents:					
Work order / Contract for the project/					
Purchase Order					
Client Certificate giving present status of the					
project and view of the quality of services by					
the Bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours Sincerely,

Signature of Authorized Signatory (with official seal)

Name :
Designation :
Address :
Telephone& Fax :

E-mail address :

Note: To be submitted with any other supporting details specified as Document Proof in Section 10.1

15.9 TQ_8: Power of Attorney for Signing of Proposal

Date: dd/mm/yyyy

To General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India.

Name of work: Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

Dear Sir,

<< Bidder's Name>> hereby authorizes << Designated Representative's Name>> to act as representative of << Bidder's name>> for the following activities vide its Board Resolution/ Power of Attorney attached herewith.

To attend all meetings with SMC/SSCDL or other entities associated with Project ("Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation) for SMC/SSCDL and to discuss, negotiate, finalize and signing of any bid documents, undertakings consequent to acceptance of bid, agreement, contract and generally to represent the bidders in all its dealing with SMC/SSCDL related to RFP for Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation" Project for SMC/SSCDL and subsequent Contract.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

	<i>J</i>	•	2	
		E PRINCIPALS ABOVE	EXECUTED	THIS
For				
(Signature)				
(Name & Title)			
Witnesses:				
1.				

(Executants)

Notes:

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

Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate

15.10 TQ_9: Power of Attorney for Lead Member of Consortium

Whereas the has invited applications from interested parties for the "Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation".

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Project and its execution.

NOW, THEREFORE,	KNOW ALL MEN BY THESE PRESENTS
We,	
M/s,	
constitute, appoint ar	ly referred to as the "Principals") do hereby irrevocably designate, nominated authorize M/s having its registered office at, being one of the Members of the Consortium, as the Lead
Member and true and	lawful attorney of the Consortium (hereinafter referred to as the "Attorney")
We hereby irrevocabl	authorize the Attorney (with power to sub-delegate) to conduct all business
for and on behalf of the	e Consortium and any one of us during the bidding process and, in the event
the Consortium is aw	arded the concession/contract, during the execution of the Project and in this
regard, to do on our b	ehalf and on behalf of the Consortium, all or any of such acts, deeds or things

as are necessary or required or incidental to the pre-qualification of the Consortium and submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and generally to represent the Consortium in all its dealings with the SSCDL, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium's bid for the Project and/ or upon award thereof till the Concession Agreement is entered into with the SSCDL.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS
For
(Signature)
(Name & Title)
For
(Signature)
(Name & Title)
Witnesses:
1.
2.
(Executants)
(To be executed by all the Members of the Consortium)

Notes:

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

Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/power of attorney in

favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate

15.11 TQ_10: Format for Authorization Letters from OEMs

<<To be printed on letter head of OEM and signed by Authorized signatory of OEM>>

Date: dd/mm/yyyy

To, General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India.

Subject: Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

Sr. No.	Product Name	Make & Model
1		
2		
•••		
N		

We herewith certify that the above mentioned equipment / software products are not end of the life / end of sale/order and we hereby undertake to support these equipment / software for the duration of minimum 6 years from the date of Bid submission.

Yours f	aithfully,	
Name	nation	
Γ	CQ_11: Bidder's Undertaking as per guidelines publ Dept. of Expenditure, Public Procurement division equent addendum	· · · · · · · · · · · · · · · · · · ·
<< <t< td=""><td>o be printed on bidder company's letterhead and signed l</td><td>by Authorized signatory>></td></t<>	o be printed on bidder company's letterhead and signed l	by Authorized signatory>>
1st Floo Surat M Opp. Sa Surat-3	ll Manager (Transit) , or, South Zone Office, Municipal Corporation, atyanagar, Udhna, 394210, Gujarat, India.	
	Selection of Implementation Agency for Design & Develop System & Business Intelligence Software Solution for Su Municipal Corporation	-
	undersigned aut me of Company>> has read clause regarding restriction try which shares a land border with India.	horized representative of <u>M/s</u> on procurement from a bidder of
country	y that quoted product from following OEMs are not from so y, these quoted products OEM have been registered with that these quoted product & its OEM fulfils all requirement sidered for procurement from Bid number < <bid number<="" td=""><td>h competent authority. I hereby its in this regard and is eligible to</td></bid>	h competent authority. I hereby its in this regard and is eligible to
No.	Item Category	Quoted Make & Model
1.		
2.		
3.		
4.		
5.		

No.	Item Category	Quoted Make & Model							
6.									
•									
•									
N									
In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority, otherwise Purchaser/End user Dept. reserves the right to take legal action on us.									
Name o	Name of the Bidder :								

Name of the Bidder : Authorized Signatory : Seal of the Organization : Business Address : Date : Place :

15.13TQ_12: OEM's Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020 and subsequent addendum

<<<To be printed on OEM company's letterhead and signed by Authorized signatory>>

To, General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna,

Surat-394210, Gujarat, India.

Sub : Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

Dear Sir,				
Mr	undersigned	authorized	representative	of M/s .
< <name company="" of="">> has read claus</name>	se regarding res	triction on pr	ocurement from	a bidder of
a country which shares a land border with	India.			
I certify that following quoted product is not quoted product(s) & we as OEM has been not this quoted product(s) fulfill all requiremprocurement from	registered with	competent au	thority. I hereby	certify that

No.	Item Category	Quoted Make & Model
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
•		
•		
N		

In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority; otherwise, Purchaser/End user Dept. reserves the right to take legal action on us.

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the OEM Organization)

Name :

Designation :

Date :

Company Seal :

Business Address :

15.14TQ_13: Bidder's Total Responsibility Certificate

<<<To be printed on bidder company's letterhead and signed by Authorized signatory>>

Date: dd/mm/yyyy

To,

General Manager (Transit), 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India.

Sub : Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation

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

Dear Sir,

This is to certify that we (M/s Bidder's Name) undertake the Total Responsibility for the defect free comprehensive and subsequent ancillary activities as per the requirements specified in scope of work of the RFP for the duration mentioned in the RFP.

We also undertake that price that bided for the said scope of work are with appropriate assumptions and Total Responsiveness with fully undertake the minimum guidelines, scope of work and clauses that mentioned in the RFP for the deployment of the service.

Name of the Bidder :
Authorized Signatory :
Seal of the Organization :
Business Address :
Date :
Place :

Notes:

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

16 Commercial Bid Format & Instructions

16.1 Cover letter for Commercial Bid

<<To be printed on letter head of Bidder and signed by Authorized signatory of bidder>>

Date: dd/mm/yyyy

To Chief Executive Officer, 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India.

Subject: Selection of Implementing Agency for Supply, Installation and Commissioning of Enterprise Management system for AFCS Project in Surat.

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

Dear Sir/ Madam,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of "Selection of Implementing Agency for Supply, Installation and Commissioning of Enterprise Management system for AFCS Project in Surat" do hereby propose to provide services as specified in the Bid Document referred above.

1. PRICE AND VALIDITY

- a. 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 entire contract duration.
- b. We hereby confirm that our Tender prices include all taxes. Taxes are quoted separately under relevant sections, as specified in the Bid Document formats.
- c. 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. 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 eligibility criteria documents, 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 eligibility criteria documents, shall not be given effect to.

3. 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.

4. 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.

5. 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 Authorized Signatory)

Name

Designation

Seal.

Date:

Place:

Business Address:

16.2 General Instructions

- 1. Bidder should provide all prices as per the prescribed format under this Section.
- 2. All the prices are to be entered in Indian Rupees (INR) only
- 3. CAPEX should not be over 70% of total project cost (i.e., CAPEX + OPEX for 5 years). If any bidder quotes CAPEX as over 70% of total project cost, SSCDL/SMC shall cap CAPEX at 70% and shall pay 30% of total project cost in 20 equal instalments for five years post project Go-Live.
- 4. The Prices mentioned in the Price Bid should include all applicable taxes & duties as applicable. The L1 evaluation will be done exclusive of taxes but inclusive of any duties applicable to the products which are not covered under GST. The bidder to quote the duties along with the rate of products proposed for L1 evaluation. The SI needs to account for all Out of Pocket expenses due to Boarding, Lodging and other related items.
- 5. SSCDL shall be entitled to deduct tax at source or any other taxes/cess as may be applicable
- 6. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for.
- SSCDL reserves the right to ask the SI to submit proof of payment against any of the taxes, duties, levies indicated.
- 8. The Unit Rate as mentioned in the following formats may be used for the purpose of 'Change Order' for respective items, if any. However, based on the market trends, SSCDL retains the right to negotiate this rate for future requirement
- 9. Quantities mentioned in the commercial formats are indicative in number. SSCDL may or may not procure the listed components in mentioned quantities. SSCDL has the rights to delete/ vary the quantities of any of the component before final implementation. Also, SSCDL reserves the right to remove any of the line components (as per BOQ provided).
- 10. The quantity specified in unpriced BOQ & Price Bid should be same.
- 11. Solution designing will be responsibility of bidder. Any additional components not quoted in Commercial bid but necessary for the solution / performance of the project, Bidder is required to provide the same to the SSCDL without any additional cost.
- 12. Any additional component required as part of Data Centre Structured Cabling solution shall be provided/supplied without any additional cost during the entire contract duration.
- 13. No escalations of prices will be considered under any circumstances.
- 14. The successful bidder shall not object to the upward or downward variation in quantities of any item or Software Licenses. SSCDL/SMC may or may not procured certain items as mentioned in Price Bid, if required.
- 15. The rates mentioned in the price bid for will be valid for 5 years from the date of Go-Live.
- 16. No claim shall be entertained or become payable for price variation of additional quantities

- 17. Bidder shall be bound to give same or more % of discount on the list price of the OEMs on the future purchases (additional purchases within the contract period) by SSCDL or. Bidder shall ensure that the future products supplied are of latest specifications as per the OEM roadmap.
- 18. For the purpose of evaluation of Commercial Bids, SSCDL 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.
- 19. SSCDL also intends to utilize various rates obtained through this tender for requirements across various departments. Bidders are requested to factor this larger demand and give the best possible rate to SSCDL.
- 20. Line items mentioned in the Commercial Formats are for representation purpose and SI may propose alternate technology / solution (with proper justification). Bidders are required to suitably add line items / merge the cost components depending upon their proposed solution.
- 21. No escalations of prices will be considered under any circumstances.

16.3 Commercial Bid Format

16.3.1 Price Component of CAPEX

The list of items indicated hereunder is indicative. The Bidder shall consider the components and quantity to fulfill the RFP and project requirements in totality.

A. Capital Expenditure (CAPEX) – Software									
#	Description	Unit of Measurement	Qty	Unit Rate (w/o GST) (INR)	Total (w/o GST) (INR)	Applicable GST in (%)	Total with GST in INR		
		Weasurement	A	В	C= A*B	G1%	D=C*(G1+10 0)%		
A	Software Components								
1	Supply, Installation and Configuration of EMS software including all modules with perpetual license to meet the RFP requirement	Lot.	1						
2	Supply and Configuration of EMS software Client/Device perpetual License	Nods.	1500						
3	Supply, Installation and Configuration and integration of Business Intelligence Software Solution with perpetual license to meet the RFP requirement (Minimum 2 Master License and 5 Viewing License)	Lot.	1						
		Total Amo	unt (In INR)		-		-		

Note: The payment will be made as per actual executed Quantity of EMS Software client/device perpetual licenses out of 1500 Qty as per tender rates for entire duration of contract.

	B. Capital Expenditure (CAPEX) – Hardware & Software with 5 Years of Warranty Support									
#	Description	Unit of Measurement	Qty	Unit Rate (w/o GST) (INR)	Total (w/o GST) (INR)	Applicable GST in (%)	Total with GST in INR			
			A	В	C = A*B	G1%	D=C*(G1+100)%			
A	Hardware Components									
1	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement							

	B. Capital E	xpenditure (CAPE	XX) – Hardware & So			rranty Suppo	ort
#	Description	Unit of Measurement	Qty	Unit Rate (w/o GST) (INR)	Total (w/o GST) (INR)	Applicable GST in (%)	Total with GST in INR
			A	В	C= A*B	G1%	D=C*(G1+100)%
2	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
3	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
4	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
5	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
В	Software Licenses for Vi as per proposed solution		er OS, Database, En	terprise Secu	rity & Antivir	us Software,	any other line item
6	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
7	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
8	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
9	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
10	Bidder to Specify	Bidder to Specify	To be Specified by Bidder as per Requirement				
		Tot	al Amount (In INR)		-		-

16.3.2 Price Component of OPEX

	C: Comprehensive Annual Maintenance (CAMC) and operations for Application Software									itions fo	r Applic	ation So	ftware		
#	Item Description	Unit of Mea sure ment	Qty	Total 1st Year Amoun t (Witho ut GST) (INR)	Total 1st Year Amou nt (With Tax) (INR)	Total 2nd Year Amoun t (Witho ut Tax) (INR)	Total 2nd Year Amou nt (With Tax) (INR)	Total 3rd Year Amoun t (Witho ut Tax) (INR)	Total 3rd Year Amou nt (With Tax) (INR)	Total 4th Year Amoun t (Witho ut Tax) (INR)	Total 4th Year Amoun t (With Tax) (INR)	Total 5th Year Amoun t (Witho ut Tax) (INR)	Total 5th Year Amou nt (With Tax) (INR)	Total Amount for 5 years (Witho ut GST) (INR)	Total Amount for 5 years (With GST) (INR)
a	b	c	d	e	f	g	h	i	j	k	1	m	n	o=e+g+i +k+m	p=f+h+j +l+n
1	EMS software including all modules with perpetual license to meet the RFP requirement	Lot	1												
2	Business Intelligence Software Solution with perpetual license to meet the RFP requirement	Lot	1												
	Total Amoun	ıt (In I	NR)												

16.3.3 Total Price Summary

	Total Price Summary									
#	Commercial Bid Summary	Total Price (INR) w/o GST	Total Price (INR) with GST							
1	A. Capital Expenditure (CAPEX) – Software									
0	B. Capital Expenditure (CAPEX) – Hardware									
2	& Software with 5 Years of Warranty Support									
0	C. Comprehensive Annual Maintenance (CAMC)									
3	and operations for Application Software									
	Total Amount (INR)									

*Note: The Details has to be entered online only.

17 Annexure I- List of AFCS Infrastructure

Some of the existing infrastructure which has been established by SMC for AFCS projects can be reutilized to cater the requirement of this project. The list of such components is mentioned below. The list of hardware as well as software components which has been implemented under the scope of AFCS project is mentioned below.

#	Components	UoM	Qty.	Make	Model
Α	Field Equipment's				
1.	POS at BRTS Bus Stations	Nos.	206	Essae	POS 415
2.	Turnstiles	Nos.	414	Magnetic Autocontrol	MPPNM01-SS304
3.	Validator	Nos.	414	AMCO	SV 360G
4.	ETM HHT Machine	Nos.	1,430	Verifone	C680
5.	Pole Validator	Nos.	1,300	AMCO	SV 360
6.	Station Server	Nos.	195	Advantech	ITA-1611
7.	UPS	Nos.	195	EMERSION	GXT MT+CX2KLB
В	Software				
1.	AFCS Software	Nos.	1	NEC	AFCS BE Software
2.	Card Validator Software	Nos.	414	AMCO	Fare Gate Validator Software
3.	Pole Validator Software	Nos.	1,300	AMCO	Software for Master - Slave City Bus Validator
4.	ETM Software	Nos.	1,300	Verifone	ETM Application for Surat BRTS
5.	Station Server Software	Nos.	195	AMCO	BRT Station Server Software
6.	Mobile Application	Nos.		Zophop	Surat SITILINK Mobile
0.	Mobile Application	NOS.	1	Zopilop	application
C	Data Center				
1.	Server	Nos.	5	HP	HP BL 460c
2.	Blade Chassis	Nos.	1	HP	HP BLC7000
3.	Storage	Nos.	1	HP	HP 3PAR8200
4.	Internet Router	Nos.	1	HP	HP MSR4060
5.	Firewall	Nos.	1	Sophos	XG 430
6.	DMZ Switch	Nos.	1	HP	HP 513024G
7.	WAN Router	Nos.	1	HP	HP MSR4060
8.	L2/L3 Switch	Nos.	2	HP	HP 513024G
9.	Server Farm Switch	Nos.	2	HP	HP 6125G/XG
10.	Virtual Tape Library	Nos.	1	HP	HP StoreOnce 5100
11.	UPS for Data Center	Nos.	2	EMERSON	EMERSON GXT/MT 6kva
12.	Desktop Workstations	Nos.	14	HP	HP
13.	Printer Network- all in one	Nos.	1	НР	HP M435 NW MFP
14.	Virtualization with vCentre	Nos.	1	VMWare	vCenter
15.	Backup Software	Nos.	1	Standard	Standard
16.	Rack	Nos.	1	APW PRESIDENT	APW PRESIDENT SmartRack 600
17	Network Switch	Nos.	173	Cisco	SG300

18 Annexure II- SLA Terms for AFCS Project

Bidder has to configure the following Service Level Agreement (SLA) in the proposed EMS for different AFCS components

Point of Sale (POS):

				Mea	asuremer	nt		
#	Item Name	Service Levels	Measu ring	Baseline Minimum	Lower Perfor mance	Critical Breach	Measured by	Applicable Damages
1	POS Machine	Availability/Up time of POS (with respect daily operational hours)	Daily	99.90%[99% to 99.90%	< 99%	POS available during operational hours/entire shift, Time log from POS, Data transferred to ITS server.	If average monthly performance of each item determines to be lower than base line (i.e., Lower Performance) but higher than the level of critical breach, then a damage of 0.42% of the value of non-
2	Station Validators/ Validators fitted on Bus	Availability/Up time of Validators (with respect to Daily Operational hours/ allocated schedule in a day for Bus)	Daily	99.90%	99% to 99.90%	< 99%	Validators available during operational hours/ for entire shift, Time log from Validators, Data transferred to ITS server	operational units/items (only those registering lower performance than baseline but higher than critical breach) shall be charged. If average monthly performance of any item is determined to be reached below the level of critical
3	Station Server	Availability/Up time of POS (with respect daily operational hours)	Daily	99.90%	99% to 99.90%	< 99%	Station Server available during operational hours, Time log from Station Server	breach, then for every decrease in the performance of any item below the critical breach (the damages payable for only those items registering performance

				Mea	asuremer	it		
#	Item Name	Service Levels	Measu ring	Baseline Minimum	Lower Perfor mance	Critical Breach	Measured by	Applicable Damages
								below the critical breach performance than baseline) shall be determined as follows Damages Payable = Value of Non-operational units X 0.83% X [(Critical Breach level - Actual level of performance)/(Critical Breach-Baseline Performance)]
								Units/items are referred as Hardware and software components.

AFCS Application:

			Maggara	N	Ieasureme r	nt		
#	Item Name	Service Levels	Measur ing Duratio n	Baseli ne Minim um	Perform al Mea		Measured by	Applicable Damages
1	AFCS Application	Report Generation Time (Query time BI Tool)	Daily	<10 sec	30 to 90 sec	> 90 sec	Query time	If average monthly performance of each item determined to be lower than base line (i.e., Lower Performance) but higher
								than the level of critical breach, then damages of

			Magazza	\mathbf{N}	leasuremen	it			
#	Item Name	Service Levels	Measur ing Duratio n	Baseli ne Minim um	Lower Perform ance	Critic al Breac h	Measured by	Applicable Damages	
2	AFCS Application	Total Application Availability	Monthly	> 99.90 %	99% -to- 99.90%	< 99%	Report from EMS	0.42% of non-operational units/items (i.e., only those registering lower	
3	AFCS Application	Grievance and Complaints settlement	Monthly	< 7 Days	08 to 12 days	> 12 days	Helpdesk ticket	performance than baseline but higher than critical breach) shall be charged.	
4	AFCS Application	Client Access - 24*7*365	Daily	99.90%	99.89% to 98%	< 98%	No of Hits/Day	If average monthly performance of any item is	
5	AFCS Application	Predetermined Report (Incl Exception Reports) Generations	Daily	< 7 Secs	08 to 20 sec	> 20 sec	Database log, Server query log	determined to be have reached Critical breach, then for every decrease in the performance of any item below the critical breach (the	
6	AFCS Application	Query based Report generations	Daily	< 15 Secs	16 to 30 sec	> 30 sec	Database log, Server query log	damages payable for only those items registering performance below the	
7	AFCS Application	Response time for data input after pressing enter (save) key to display a response.	Daily	< 5 sec	06 to 20 sec	> 20 sec	Server Log	critical breach performance than baseline) shall be determined as follows: Damages Payable = Value of Non-operational units X	
8	AFCS Application	Response time for on-line inquiry	Daily	< 5 sec	06 to 20 sec	> 20 sec	Server Log	o.83% X [(Critical Breach level - Actual level of performance)/(Critical Breach-Baseline	
9	AFCS Application	Manpower Deployment	Daily	3 days	5 days	7 days	Attendance &Manager report	Performance)] Units/items are referred as	

			Maggara	N	Ieasureme n	nt		
#	Item Name	Service Levels	Measur ing Duratio n	Baseli ne Minim um	Lower Perform ance	Critic al Breac h	Measured by	Applicable Damages
							Resource Deployment Timeline to be submitted	Hardware and software components.
10	AFCS Application	POS Offline &other Application Availability	Daily	99.95%	99.94% to 98%	< 98%	1. Helpdesk Tickets	

Hand-Held Ticketing machine (HHT)

				M	easurement			
#	Item Name	Service Levels	Measuring Duration	Baseline Minimu m	Lower Performa nce	Critic al Breac h	Measured by	Applicable Damages
1	нтт	Availability/Up time of HTT (with respect to allocated schedule in a day)	Daily	99.90%	99% to 99.90%	< 99%	HTT available for entire shift, Time log from HTT, Data transferred to ITS server from GPRS	If average monthly performance of each item determined to be lower than base line (i.e., Lower
								Performance) but

				M	easurement			
#	Item Name	Service Levels	Measuring Duration	Baseline Minimu m	Lower Performa nce	Critic al Breac h	Measured by	Applicable Damages
2	нтт	Adequate memory on devices for fare tables, rules, transaction data (No of Schedules of Depot)	Quarterly	100%	80%	< 80%	HTT Report on schedule related data loaded	higher than the level of critical breach, then damages of 0.42% of non-operational units/items (i.e., only those registering lower
3	нтт	Replacement Time of Malfunction HTT(Major (Days)/Minor (Days))	Daily	(01/02)	(03/05)	(05/07	Issue logged in Helpdesk app.	performance than baseline but higher than critical breach) shall be charged.
4	НТТ	Time/Ticket Print (Seconds)	Quarterly	3 to 4 sec	5 to 8 sec	9 to 15 sec	Periodic field/lab testing/conductor reports	If average monthly performance of any item is determined to be have reached
5	нтт	HTT Battery Performance [No of Tickets/Full charge of Battery or 12 Hours (Per- Shift)/Schedule in case of Night out]	Quarterly	800 Tickets	600 Tickets	500 Ticket s	Periodic field/lab testing	to be have reached Critical breach, then for every decrease in the performance of any item below the critical breach (the damages payable for only those items registering performance below
6	HTT	Availability of GPRS Network	Daily	98%	90% to 98%	<90%	SLA with ISP, NMR	the critical breach

				M	easurement			
#	Item Name	Service Levels	Measuring Duration	Baseline Minimu m	Lower Performa nce	Critic al Breac h	Measured by	Applicable Damages
7	нтт	Replacement of faulty machine buttons due to constant use	Daily	2 Hours	6 Hours	12 Hours	Issue logged in Helpline app.	performance than baseline) shall be determined as follows:
8	НТТ	No. of restarts of HTT by the conductor	Daily	o/day	1/day	2/day	Permissible/day; Conductor report and HTT Log	Damages Payable = Value of Non- operational units X
9	нтт	Extra HTT - with SP (@ each Depot)	Quarterly	10%	5%	2%	SSCDL to decide	o.83% X [(Critical Breach level - Actual level of
	НТТ	1) An investigatio not available for a				reason as	s to why the machine was	performance)/(Crit ical Breach-
	нтт		management 7 working da	or due to an ys of filing o	y other reaso of complaint f	on. The in from SP a	al due to vestigation will be nd based upon the results	Baseline Performance)] Units/items are referred as Hardware and software components.

Datacentre:

				Me	asurement			
#	Item Name	Service Levels	Measuring Duration	Baseline Minimum	Lower Performa nce	Critica l Breach	Measured by	Applicable Damages
1	DC	IT Infrastructure for production environment should be designed in such a way that the infrastructure shall be made available % without single point of failure.	Monthly	99.50%	99.49% to 97%	< 97%	EMS Report & Server Log	If average monthly performance of each item determined to be lower than base line (i.e., Lower Performance) but higher than the level of critical breach, then damages of 0.42% of non-operational units/items (i.e., only those registering lower performance than baseline
2	DC	The system shall be operational, reliable, and available for business processes and mission – critical operation.	Monthly	24*7*365	-	-	EMS Report & Server Log	but higher than critical breach) shall be charged. If average monthly performance of any item is determined to be have reached Critical breach,
3	DC	CPU utilization must not cross beyond % at any time of processing	Monthly	75%	76% to 80%	> 80%	EMS Report & Server Log	then for every decrease in the performance of any item below the critical breach (the damages payable for only those items registering performance below the critical breach performance than baseline) shall be
4	DC	Resumption of online AFCS services (Per Event)	Monthly	<45 min	45min to 60 min	> 60 min	Network log	
5	DC		Daily	99.99%		< 98%	Helpdesk ticket	determined as follows:

				Mea	asurement			
#	Item Name	Service Levels	Measuring Duration	Baseline Minimum	Lower Performa nce	Critica l Breach	Measured by	Applicable Damages
		Local Area Network availability			99.98% to 98%			Damages Payable = Value of Non-operational units X
6	DC	Fixing a bug or issue (Low/ Medium/ High)	Monthly	< 11 / 8 / 4 Hour	16/12/8 - 12/8/4 Hours	16/12/ 8 hour	Helpdesk ticket	o.83% X [(Critical Breach level - Actual level of performance)/(Critical Breach-Baseline Performance)]
7	DC	Website uptime with all the features	Monthly	99%	99% to 98%	<98%	Helpdesk ticket	Units/items are referred as Hardware and software components.
8	DC	Point to Point (P2P) Communication	Monthly	98%	98% to 90%	<90%	Network log & SLA with ISP	
10	DC	AFCS Application Availability	Daily	99%	99%-98%	<98%	Log from ITS server Uptime/Downt ime	
11	DC	Functional requirements upgrade (No of Days)	Monthly	< 60 Days	60 to 75 days	> 75 days	Application Update Log	
12	DC	Minimum Concurrent Connects to AFCS (Internal)	Daily	>100	99 to 75	< 75	Log of number of Hits per day	
13	DC	Minimum Concurrent Connects to	Daily	> 5000	4999 to 4500	< 4500	Log of number of Hits per day	

				Mea	surement			
#	Item Name	Service Levels	Measuring Duration	Baseline Minimum	Lower Performa nce	Critica l Breach	Measured by	Applicable Damages
		AFCS (External)						
14	DC	Minimum Connects to AFCS (Internal)	Daily	> 200	199 to 175	< 175	Log of number of Hits per day	
15	DC	Minimum Connects to AFCS (External)	Daily	> 15000	14999 to 14000	< 14000	Log of number of Hits per day	
16	DC	Availability of systems at Data Centre	Daily	99%	98.99% to 95%	< 95%	Report from EMS	
17	DC	Capacity of the Database Server (Service Transactions/ Hour)	Daily	Average transaction/H our	-	-	Average transaction size from all field equipment's per minute *60	
18	DC	Capacity of the Application Server (Service Transactions/ Hour)	Daily	Average transaction/H our	-	-	Average transaction size from all field equipment's per minute *60	
19	DC	Availability of agreed services over the internet	Daily	100%	99.99% to 95%	<95%	Report from EMS	
20	DC	Network availability	Daily	99%	98.99% to 98%	< 98%	Report from EMS	
21	DC		Monthly	> 75		<72%		

	Item Name	Service Levels	Measuring Duration	Measurement				
#				Baseline Minimum	Lower Performa nce	Critica l Breach	Measured by	Applicable Damages
		Network Latency Average of (Milliseconds/ Month)			<75% to 72%		Report from EMS	
22	DC	Uptime of Back Office Servers	Monthly	100%	-	-	Report from EMS	
23	DC	Time to restore back office servers from failure	Daily	< 1 Hr	60mins - to- 90mins	> 90 mins	Report from EMS	
24	DC	Roll out of latest anti-virus definition file on work station and server being made available by SP	Quarterly	98%	98% to 96%	<95%	report generated by antivirus software console	
25	DC	Roll out of latest updated patches/fixes, version upgrades	Quarterly	98%	98% to 96%	<95%	Patch update report	
26	DC	Data backup and Restore management	Quarterly	99%	99%to97%	<97%	Report from EMS, SMC would periodically(on ce a quarter on a random day) tell SP to restore the data back up	

				Measurement				
#	Item Name	Service Levels	Measuring Duration	Baseline Minimum	Lower Performa nce	Critica l Breach	Measured by	Applicable Damages
27	DC	System Handling capacity for 25% additional load	Monthly	99%	99%to97%	<97%	Report from EMS	

19 Annexure III- Master Service Agreement

Draft of contract agreement, subject to change at the time of execution)

(To be printed on Rs. 300/- Stamp Paper)

Passport size Photo of Authorized Signatory with crossed Sign and Seal.

MASTER SERVICE AGREEMENT

FOR

NAME OF WORK :

CONTRACTOR'S NAME :

TENDER AMOUNT :

LETTER OF INTENT (LoI) :

NO. & DATE

SANCTIONING AUTHORITY:

This **AGREEMENT** is made at 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat -394210, Gujarat, India on this _____ day of _____, 20_____,

BETWEEN

(1) Surat Smart City Development Limited, a company incorporated under the Companies Act, 2013 with CIN: U74999GJ2016PLC091579 and having its Registered Office at 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India (hereinafter called "the Company" or "the SPV" or "the Client" or "SSCDL" which expression unless repugnant to the context therein, shall include its successors, administrators, executors and

Company AND (2) a company registered under the Companies having its registered office Act, 1956, at hereinafter referred to as "Systems Integrator" or "SI" or "Vendor" or "Contractor", (which expression unless repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees), of SECOND **PART** represented by of the as WHEREAS party to the First part is established as the 'Special Purpose Vehicle' (SPV) under the Smart City Program of the Government of India, and based on the submission and approval of the Smart City Proposal (SCP) has authority to execute the projects so approved within the framework of the Smart City Mission Statement and Guidelines issued by the Ministry of Urban Development in June 2015 (hereinafter referred as "Guidelines"): AND WHEREAS RFP for one of the approved projects under SCP related to Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation (hereinafter referred as the "EMS System and BIS Software Solution Project." or "the Project") was published by SSCDL on ______, to seek services of a reputed IT firm as a System Integrator for Implementing Agency for Design & Development of Enterprise **Management System & Business Intelligence Software Solution**; And whereas M/s. ----- has submitted its proposal for "Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation"; AND whereas SSCDL has selected M/s.....as successful bidder and issued Letter of Intent No. dated to the successful bidder who in turn signed and returned the same as a token of acceptance of Letter of Intent. As required, the System Integrator Rs. has furnished Security Deposit of Bank Guarantee as No. dated for performance of the Project. AND Whereas the SSCDL has adopted the System Integrator's tender for the project through the Project Committee established by the Board of Directors of the Company (hereinafter referred as "The Project Management Committee") vide Resolution No._____ having of tender Amount of Rs. Ps

permitted assignees) of the FIRST PART represented by CEO / Director / GM (IT) of the

And whereas SSCDL and M/s. ------ have decided to enter into this Agreement on the terms and conditions stipulated hereinafter.

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:

Definitions

In this Agreement, the following terms shall be interpreted as indicated, -

- (a) "SSCDL" means Surat Smart City Development Limited;
- (b) "SPV" means Special Purpose Vehicle
- (c) "SCP" means Smart City Proposal
- (d) "Contract" means this Agreement entered into between SSCDL and the Systems Integrator including all attachments and annexure thereto and all documents incorporated by reference therein;
- (e) "Systems Integrator" means M/s. ----- interchangeably referred to as "SI" in the contract; and
- (f) "RFP" means the Tender Published by SSCDL (Ref. No. -----) and the subsequent Corrigenda / Clarifications issued.
- (g) "Go Live or successful completion of implementation of the project" date means the date on which the proposed project stream becomes operational after successful conclusion of all acceptance tests to the satisfaction of SSCDL.
- (h) "Deliverable" means any action / output generated by the SI while discharging their contractual obligations. This would include information and all the other services rendered as per the scope of work and as per the SLAs.
- (i) "Assets" refer to all the hardware / Software / furniture / data / documentations / manuals / catalogs / brochures / or any other material procured, created or utilized by the SI for the Surat City 'Smart Elements' Project.
- (j) "Guidelines" refer to the set of instructions given by Ministry of Urban Development regarding Smart City Mission

Interpretation

- The following documents shall be deemed to form part and considered as part of this agreement. Viz. this Agreement;
- Information and the instructions, Scope of Services, Service Level Agreement, Terms and Conditions, etc. in the RFP document and subsequent Addenda and Corrigenda document.
- Relevant contents filled-in, tendered, mentioned by the SI as part of "Technical Proposal" and
 "Commercial Proposal" submitted in response to the RFP and subsequent clarifications and/or
 undertakings submitted by the SI.

Term of the Agreement

This agreement shall come into force and effect from the date of execution by both parties. The term of this agreement shall be a period of 5 years from the date of Go-Live of Project including warranty & comprehensive operation & maintenance (O&M) support.

In the event of implementation period getting extended beyond implementation timelines, for reasons not attributable to the Systems Integrator, SSCDL reserves the right to extend the term of the Agreement by corresponding period to allow validity of contract for 5 years from the date of successful completion of implementation of all the project components. (Note: Delay caused due to any reason not in control of the SI would not be attributed to the project period.)

SSCDL also reserves the right to extend the contract at its sole discretion for additional duration, beyond the 5 years of post-implementation period. Terms and conditions of such an extension shall be prepared by SSCDL and finalized in mutual discussion with the SI.

Work Completion timelines and Fees

The work completion timeline is as per Section 12 of the RFP and Subsequent Addendum & Corrigenda.

Payment Terms The Payment terms is as per Section 12 of the RFP and subsequent Addendum & Corrigendum.

Timeline for Project Execution

The Timeline for EMS System and BIS Solution Project is as per Section 12 of the RFP and subsequent Addendum & Corrigendum

Scope Extension

SSCDL reserves right to extend the scope of services for the price & timelines as given in RFP. The SLAs applicable to this Contract shall be liable for the additional items too.

Service Level Agreement (SLA)

System Integrator is required to comply with the SLA as mentioned in Section 13 of the RFP and subsequent Addendum & corrigendum.

Insurance

The bidder will be required to undertake the insurance for all components of the Project which has been procured under this RFP as well as existing systems and infrastructure as mentioned in RFP.

i. Insurance during the Contract Period

The System Integrator shall, at its cost and expense, purchase and maintain during the Contract Period, such insurances as are necessary including but not limited to the following:

- Hardware/ Structure/Software delivered and installed to the extent possible at the replacement value with Authority as beneficiary.
- Fire and allied natural calamities for the project limited to the scope of supply at replacement value with the Authority as beneficiary;

- System Integrator's all risk insurance with the Authority as co-beneficiary;
- Comprehensive third party liability insurance with the SMC/SSCDL as co-beneficiary;
- Workmen's compensation insurance with the SMC/SSCDL as co-beneficiary;
- Any other insurance that may be necessary to protect the System Integrator, its employees and the Project against loss, damage or destruction at replacement value including all Force Majeure Events that are insurable and not otherwise covered in items (a) to (e) with the Authority as beneficiary/co-beneficiary;

ii. Evidence of Insurance Cover

- The System Integrator shall, from time to time, provide to the Authority copies of all insurance policies (or appropriate endorsements, certifications or other satisfactory evidence of insurance) obtained by it in accordance with System Integrator Agreement.
- If System Integrator shall fail to effect and keep in force the insurance for which it is responsible pursuant hereto, Authority shall have the option to take or keep in force any such insurance, and pay such premium and recover all costs thereof from System Integrator.

iii. Application of Insurance Proceeds

- All moneys received under insurance policies shall be promptly applied by the System Integrator towards repair or renovation or restoration or substitution of the Project or any hardware/equipment/device/software thereof which may have been damaged or required repair/modification.
- The System Integrator shall carry out such repair or renovation or restoration or substitution to the extent possible in such manner that the Project, or any part thereof, shall, after such repair or renovation or restoration or substitution be as far as possible in the same condition as they were before such damage or destruction, normal wear and tear excepted.
- For insurance policies where the Authority is the beneficiary and where it received the insurance proceeds, only such sums as are required from the insurance proceeds for restoration, repair and renovation of the Project.

iv. Validity of Insurance Cover

The System Integrator shall pay the premium payable on such insurance Policy/Policies so as to keep the insurance in force and valid throughout the Contract Period and furnish copies of the same to the Authority for each year/policy period. If at any time the System Integrator fails to purchase, renew and maintain in full force and effect, any and all of the Insurances required under this System Integrator Agreement, the Authority may at its option purchase and maintain such insurance and all sums incurred by the Authority therefore shall be reimbursed by the System Integrator forthwith on demand, failing which the same shall be recovered by the Authority by encashment of Performance Security, exercising right of set off or otherwise

Use & Acquisition of Assets during the term

System Integrator shall take all reasonable & proper care of the entire hardware & software, network or any other information technology infrastructure components used for the project & other facilities leased/owned by the system integrator exclusively in terms of the delivery of the services as per this Agreement (hereinafter the "Assets" which include all the hardware / Software / furniture / data / documentations / manuals / catalogs / brochures / or any other material procured, created or utilized by the SI or the SSCDL for the Surat Project) 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; Note: Hardware upgrades outside the RFP scope would not be part of the original contract and would be catered through change request. Assets would be owned by the SSCDL however, the System Integrator would be custodian of the same during the entire contract period and would take care of all wear-tear, insurance, theft etc. so that the SLAs are not affected.

Maintain sufficient spare inventory at all times, for all items of importance;

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 RFP to meet the SLAs mentioned in the contract & during the entire term of the Agreement.

ensure that any instructions or manuals supplied by the manufacturer of the Assets for use of Assets & which are provided to the system integrator will be followed by the System integrator & any person who will be responsible for the use of the Asset;

take such steps as may be recommended by the manufacturer of the Assets & notified to the system integrator or as may be necessary to use the Assets in a safe manner;

provide a well-prepared documentation for users in the manual, a clear plan for training, education & hand holding the users & shall form part of hand holding phase until bringing up the users to use software solution with speed & efficiency;

To the extent that the Assets are under the control of the system integrator, keep the Assets suitably housed & in conformity with any statutory requirements from time to time applicable to them,

Provide and facilitate access to SSCDL or its nominated agencies & any persons duly authorized by him/her to enter any land or premises on which the Assets are for the time being sited so as to inspect the same, subject to any reasonable requirements;

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;

Use the Assets exclusively for the purpose of providing the Services as defined in the contract;

Use the Assets only in accordance with the terms hereof & those contained in the SLAs;

Maintain standard forms of comprehensive insurance including liability insurance, system & facility insurance & any other insurance for the Assets, data, software, etc in the joint

names of SSCDL & the System Integrator, where SI shall be designated as the 'loss payee' in such insurance policies; SI shall be liable to pay premium for the insurance policy & shall ensure that each & every policy shall keep updated from time to time.

Ensure the integration of the software with hardware to be installed and the current Assets in order to ensure the smooth operations of the entire solution architecture to provide efficient services to SSCDL of this Project in an efficient and speedy manner; &

Obtain a sign off from SSCDL or its nominated agencies at each stage as is essential to close each of the above considerations.

Ownership of the Assets shall vest with SSCDL from the date of Supply of the project. Ownership of any asset, created during the contractual period, shall also vest with SSCDL upon creation of such asset. System Integrator shall not use SSCDL data or assets to provide services for the benefit of any third party, as a service bureau or in any other manner. On expiry of the contract, SI shall be required to handover all the tangible and non-tangible assets in working condition. In case any assets are found to be damaged at the time of handover, SI is required to repair/replace the same at no cost to SMC/SSCDL.

Security and safety

- The System Integrator will comply with the directions issued from time to time by SSCDL and the standards related to the security and safety in so far as it applies to the provision of the Services.
- System Integrator shall also comply with the information technology security and standard
 policies in force from time to time by SSCDL/SMC or as recommended by any statutory
 authority.
- System Integrator 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 SSCDL's data, facilities or Confidential Information.
- The System Integrator shall upon reasonable request by SSCDL or his/her nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.
- System Integrator and its partners / sub-contractors shall promptly report in writing to each
 other and SSCDL 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 SSCDL's Facilities.

Indemnity

The System Integrator agrees to indemnify and hold harmless SSCDL, 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 attorney's 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

any mis-statement or any breach of any representation or warranty made by the System Integrator or

The failure by the System Integrator to fulfil 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 System Integrator. Against all losses or damages arising from claims by third Parties that any Deliverable (or the access, use or other rights thereto), created System Integrator pursuant to this Agreement, or any equipment, software, information, methods of operation or other intellectual property created by System Integrator or sub-contractors pursuant to this Agreement, (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) "Implementation of Project by itself or through other persons other than System Integrator or its sub-contractors; (B) Third Parties (i.e., other than System Integrator or sub-contractors) at the direction of SSCDL, or

any compensation / claim or proceeding by any third party against SSCDL arising out of any act, deed or omission by the System Integrator or

Claim filed by a workman or employee engaged by the System Integrator 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.

Third Party Claims

- a. Subject to Sub-clause (b) below, the System Integrator (the Indemnifying Party) shall indemnify and hold harmless SSCDL and all its employees and authorized agents (the "Indemnified Party") from and against all losses, third party claims, litigation and damages on account of bodily injury, death or damage to tangible personal property arising in favor 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 defense 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. system integrator hereby indemnify & hold indemnified the SSCDL 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;
- vii. 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; &
- viii. 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;
- ix. 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.

Publicity

Any publicity by the SI in which the name of SSCDL is to be used should be done only with the explicit written permission of the CEO, SSCDL.

Warranties

a. The System Integrator warrants and represents to SSCDL that:

It has full capacity and authority and all necessary approvals to enter into and to perform its obligations under this Agreement;

This Agreement is executed by a duly authorized representative of the System Integrator;

It shall discharge its obligations under this Agreement with due skill, care and diligence so as to comply with the RFP requirements including service level agreement.

- b. In the case of the SLAs, the System Integrator warrants and represents to SSCDL, that:
 - the System Integrator has full capacity and authority and all necessary approvals to enter into and perform its obligations under the SLAs and to provide the Services;
 - The SLAs have been executed by a duly authorized representative of the System Integrator;
 - The System Integrator is experienced in managing and providing works similar to the Services and that it will perform the Services with all due skill, care and diligence so as to comply with service level agreement;
 - The Services will be provided and rendered by appropriately qualified, trained and experienced personnel as mentioned in the RFP;
 - System Integrator 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;
 - The Services will be supplied in conformance with all laws, enactments, orders and regulations applicable from time to time;
 - System Integrator will warrant that the goods supplied under the contract are new, unused, of the most recent higher version /models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The System Integrator further warrants that the goods supplied under this contract shall have no defects arising from design, materials or workmanship.
 - The overall system design shall be such that there is no choking point / bottleneck anywhere in the system (end-to-end) which can affect the performance / SLAs.
 - Subject to the fulfillment of the obligations of the System Integrator as provided for in sub clause (viii) above, in the event that such warranties cannot be enforced by SSCDL, the System Integrator will enforce such warranties on behalf of SSCDL and pass on to SSCDL, the benefit of any other remedy received in relation to such warranties.
- c. Notwithstanding what has been stated elsewhere in this Agreement and the Schedules attached herein, in the event the System Integrator is unable to meet the obligations pursuant to the implementation of the Project, Operations and Maintenance Services and any related scope of work as stated in this Agreement and the Schedules attached herein, SSCDL will have the option to invoke the Performance Guarantee after serving a written notice of thirty (30) days on the system Integrator.

Force Majeure & Vandalism

In the event that any Damages to items due to Vandalism (physical Majeure attack by public, tampering of equipment by SMC / SSCDL staff and damage due to accidents) or due to Force Majeure events (such as earthquake, fire, natural calamities, war, act of God) of any kind during Contract Period shall be the liability of SSCDL. In such case, SSCDL/Authority shall request the successful Bidder to repair/replace the damaged unit and reinstall the same. All costs towards the same shall be reimbursed by SSCDL/Authority to the successful Bidder less of insurance proceeds if need of replacement so arise then replacement shall be on tender rates only.

The System Integrator 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 System Integrator, not involving the System Integrator'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 SI to take benefit of this clause it is a condition precedent that the SI must promptly notify the SSCDL, in writing of such conditions and the cause thereof within 14 calendar days of the Force Majeure event arising. SSCDL, or the consultant / committee appointed by the SSCDL shall study the submission of the SI and inform whether the situation can be qualified one of Force Majeure. Unless otherwise directed by the SSCDL in writing, the SI 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, SSCDL and the SI 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 the SSCDL shall be final and binding on the SI.

Resolution of Disputes

The SSCDL and the SI 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 30 days from the commencement of such informal negotiations, the SSCDL and the SI are unable to resolve amicably such dispute, the matter will be referred to the Chairman, SSCDL, and his / her decision shall be final and binding to both.

Limitation of Liability towards SSCDL

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

This limitation of liability shall not limit the SI"s liability, if any, for damage to Third Parties caused by the SI or any person or firm acting on behalf of the SI in carrying out the scope of work envisaged herein.

Conflict of Interest

A conflict of interest is any situation that might cause an impartial observer to reasonably question whether SI actions are influenced by considerations of your firm's interest at the cost of Government.

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

Safety Regulation, Accident and Damage

The Bidder shall be responsible at his own cost in and relative to performance of the work and bidder to observe and to ensure observance by his Sub-contractors, agents and servants of the provisions of Safety Code as hereinafter appearing and all fire, Safety and security regulations as may be prescribed by the Owner from time to time and such other Precautions, measures as shall be necessary and shall employ / deploy all equipment necessary to protect all works, materials, properties, structures, equipment, installations, communications and facilities whatsoever from damage, loss or other hazard whatsoever (including but not limited to fire and explosion) and shall during construction and other operations minimize the disturbance and inconvenience to the Owner, other bidders, the public and adjoining land and property owners and occupiers, and crops, trees and vegetation and shall indemnify and keep indemnified the One from and against all losses and damages and costs, charges and expenses and penalties, actions, claims, demands and proceedings whatsoever suffered or incurred by or against the Owner, as the case may be, virtue of any loss, alteration, displacement, disturbance or destruction or accident to any works materials, properties, structures, equipment, installations communications and facilities and land and property owners and occupiers and crops, trees and vegetation as aforesaid, with the intent that the Bidder shall be exclusively responsible for any accident, loss, damage, alteration, displacement, disturbance or destruction as aforesaid resultant directly or indirectly from any breach by the Bidder of his obligation aforesaid or upon any operation, act or omission of the bidder his Sub-contractor(s) or agent(s) or servant(s).

The Bidder's liabilities under Clause (a) and otherwise under the Contract shall remain unimpaired notwithstanding the existence of any storage cum erection or other insurance covering any risk, damage, loss or liability for which the Bidder is liable to the Owner in terms of the foregoing Sub-Clause or otherwise and / or in respect of which the Bidder has indemnified

the Owner with the intent that notwithstanding the existence of such insurance, the Bidder shall be and remain fully liable for all liabilities and obligations under the contract and indemnified to the Owner, and the Owner shall not be obliged to seek recourse under such policy(ies) in preference to recourse against the Bidder or otherwise to exhaust any other remedy in preference to the remedies available to in under the Contract prior written approval of SSCDL. However, even if the work is sub-contracted / outsourced, the sole responsibility of the work shall lie with the SI. The SI shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the sub-contracting agreements (if any) between both the parties would be required to be submitted to SSCDL.

Data Ownership

All the data created as the part of the project shall be owned by SSCDL. The SI shall take utmost care in maintaining security, confidentiality and backup of this data. Access to the data / systems shall be given by the SI only as per the IT Security Policy, approved by SSCDL. SSCDL / its authorized representative(s) shall conduct periodic / surprise security reviews and audits, to ensure the compliance by the SI Vendor to data / system security.

Intellectual Property Rights

- A. For the customized solution developed for the project, IPR of the solution would belong exclusively to the SSCDL. The SI shall transfer the source code to SSCDL. SI shall also submit all the necessary instructions for incorporating any modification / changes in the software and its compilation into executable / installable product. SSCDL may permit the SI, right to use the customized software for any similar project being executed by the same SI, with payment of reasonable royalty to SSCDL for the same.
- B. Deliverables provided to SSCDL by System Integrator during the course of its performance under this Agreement, all rights, title and interest in and to such Deliverables, shall, as between System Integrator and SSCDL, immediately upon creation, vest in SSCDL. To the extent that the System Integrator Proprietary Information is incorporated within the Deliverables, System Integrator and its employees engaged hereby grant to SSCDL a worldwide, perpetual, irrevocable, non-exclusive, transferable, paid-up right and license to use, copy, modify (or have modified), use and copy derivative works for the benefit of and internal use of SSCDL.

Fraud and Corruption

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

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of SSCDL in contract executions.

"Fraudulent practice" means a mis-presentation of facts, in order to influence a procurement process or the execution of a contract, to SSCDL, 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 SSCDL of the benefits of free and open competition.

"Unfair trade practices" means supply of services different from what is ordered on, or change in the Scope of Work which is given by the SSCDL "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 SI has indulged into the Corrupt / Fraudulent / Unfair / Coercive practices, it will be a sufficient ground for SSCDL for termination of the contract and initiate black-listing of the vendor.

Exit Management

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 6 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 SI. The exit management period ends on the date agreed upon by the SSCDL or Six months after the beginning of the exit management period, whichever is earlier.

Confidential Information, Security and Data

Systems Integrator will promptly on the commencement of the exit management period, supply to the SSCDL or its nominated agencies the following:

Information relating to the current services rendered and performance data relating to the performance of the services; Documentation relating to Project, Project's Intellectual Property Rights; any other data and confidential information related to the Project;

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.

All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable the SSCDL and its nominated agencies, or its Replacing Vendor to carry out due diligence in order to transition the provision of the Services to SSCDL or its nominated agencies, or its Replacing Vendor (as the case may be).

Rights of Access to Information

At any time during the exit management period, the Successful Bidder will be obliged to provide an access of information to SSCDL and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / Software / Active / passive), documentations, manuals, catalogs, archive data, Live data, policy documents or any other material related to Project.

Exit Management Plan

Successful Bidder shall provide SSCDL with a recommended exit management plan ("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 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;

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;

Plans for provision of contingent support to the Surveillance Project and Replacement Vendor for a reasonable period (minimum one month) after transfer.

Successful Bidder shall re-draft the Exit Management Plan annually to ensure that it is kept relevant and up to date.

Each Exit Management Plan shall be presented by the Successful Bidder to and approved by SSCDL or its nominated agencies.

The terms of payment as stated in the Terms of Payment Schedule include the costs of the Successful Bidder complying with its obligations under this Schedule.

During the exit management period, the Successful Bidder shall use its best efforts to deliver the services.

Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.

Transfer Cost

On premature termination of the contract for reasons other than those mentioned in Termination for Default, the Successful Bidder shall be paid the depreciated book value of the infrastructure cost and the other assets (as per the Asset Register). The depreciation rates and method followed will be as per Income Tax Rules.

Note: Amount to be payable by SI on premature termination of contract =

Pending amount to be paid against services delivered + Depreciated Book Value of the Assets as per Income Tax Rules – Applicable Penalty / Liquidated Damages

Termination of Contract

SSCDL 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 SI and as it deems fit, terminate the contract either in whole or in part:

• If the SI fails to deliver any or all of the project requirements / operationalization / golive of the project within the time frame specified in the contract;

or

• If the SI fails to perform any other obligation(s) under the contract.

On receipt of such notice, SI will be required to cure any breach/ default of the Contract, if SSCDL is of the view that the breach may be rectified.

On failure of the SI to rectify such breach within 30 days, SSCDL may terminate the contract, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to SSCDL. In such event the SI shall be liable for penalty/liquidated damages imposed by the SSCDL. The performance Guarantee shall be forfeited by the SSCDL

Consequences of Termination

In the event of termination of this contract, SSCDL 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 SI 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 SSCDL and/ or succeeding vendor, as may be required, to take over the obligations of the SI in relation to the execution / continued execution of the requirements of this contract.

Plans and drawings

All plans, drawings, specifications, designs, reports and other documents prepared by the Vendor in the execution of the contract shall become and remain the property of SSCDL and before termination or expiration of this contract the SI shall deliver all such documents, prepared under this contract along with a detailed inventory thereof, to SSCDL.

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, video footages, alert information, any police department data, products, processes, data, crime / criminal secrets, 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 consortium partners or 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 SSCDL, the Systems Integrator (including all consortiums or 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 Systems Integrator and it's Personnel make public the recommendations formulated in the course of, or as a result of the Project.

The System Integrator 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 System Integrator. Disclosure or usage of the data by any such recipient may constitute a breach of law applicable causing harm not only to SSCDL / SMC whose data is used but also to its stakeholders. System Integrator, its Subcontractors & agents are required to demonstrate utmost care, sensitivity & strict confidentiality. Any breach of this Article will result in SSCDL & its nominees receiving a right to seek injunctive relief & damages from the System Integrator.

- **b.** Each Party agrees as to any Confidential Information disclosed by a Party to this Agreement (the "Discloser") to the other Party to this Agreement (the "Recipient") &
 - i. to take such steps necessary to protect the Discloser's Confidential information from unauthorized use, reproduction & disclosure, as the Recipient takes in relation to its own Confidential Information of the same type, but in no event less than reasonable care;
 - ii. to use such Confidential Information only for the purposes of this Agreement or as otherwise expressly permitted or expressly required by this Agreement or as otherwise permitted by the Discloser in writing; &
 - iii. not, without the Discloser's prior written consent, to copy the Confidential Information cause or allow it to be copied, directly or indirectly, in whole or in part, except as otherwise expressly provided in this Agreement, or as required in connection with Recipient's use as permitted under this Article, or as needed for the purposes of this Agreement, or as needed for the purposes of this Agreement, provided that any proprietary legends & notices (whether of the Discloser or of a Third Party) are not removed or obscured; &
 - iv. Not, to disclose, transfer, publish or communicate the Confidential Information in any manner, without the Discloser's prior written consent, to any person except as permitted under this Agreement.
 - **c.** 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.

- **d**. 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.
- **e**. The provisions of this Article shall survive three years post expiration or any earlier termination of this Agreement.
- **f.** confidential Information shall be & remain the property of the Discloser & nothing in this Article shall be construed to grant either Party any right or license with respect to the other Party's confidential Information otherwise than as is expressly set out in this Agreement.
- g. Subject as otherwise expressly provide in this Agreement all Confidential information in tangible or electronic form under the control of the Recipient shall either be destroyed, erased or returned to the Discloser promptly upon the earlier of: (i) the written request of the Disclose, or, (ii) termination or expiry of this Agreement .Notwithstanding the forgoing, both Parties may retain, subject to the terms of this Article, reasonable number of copies of the other Party's Confidential Information solely for confirmation of compliance with the confidentiality obligations of this Agreement.
- h. Neither Party is restricted by the provisions of this clause from using (including using to provide products or perform services on behalf of third Parties) any ideas, concepts, know-how & techniques that are related to the Recipient's employees or agents (and not intentionally memorized for the purpose of later recording or use) (collectively, the "residuals"). This Article shall not permit the disclosure or use by either Party or any financial (including business plans), statistical, product, personnel or customer data or the other Party. Each party agrees not to disclose the source of the Residuals.
- i. Both Parties agree that monetary damages would not be a sufficient remedy for any breach of this clause by the other Party & that SSCDL & system integrator, as appropriate, shall be entitled to equitable relief, including injunction & specific performance as a remedy for any such breach. Such remedies shall not be deemed to

be the exclusive remedies for a breach by a Party of this clause, but shall be in addition to all other remedies available at law or equity to the damaged Party.

j. in connection with the Services, System Integrator may from time to time undertake one or more quality assessment reviews for the purpose of improving the SSCDL Project. In order for such reviews to be frank & candid, for the greatest benefit to both SSCDL & System Integrator, they shall be kept confidential to the greatest extent possible. The Parties agree that any documentation created in connection with such quality assessment reviews shall be confidential Information of System Integrator which is licensed to SSCDL for any internal use except that in no event shall such documentation or the results of such reviews be discoverable or admissible (or used for any purpose) in any arbitration or legal proceedings against System integrator related to this Agreement or the Services.

b) Standards of Performance

The SI 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 SI shall always act in respect of any matter relating to this contract. The SI shall abide by all the provisions/Acts/Rules/Regulations, Standing orders, etc. of Information Technology or otherwise as prevalent in the country. The SI shall also conform to the standards laid down by SMC or SSCDL or Government of Gujarat 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 Systems Integrator. Sub-contracting / out sourcing would be allowed only for work like

- Passive Networking
- Services delivered by the respective Product Vendors / OEMs

The bidder is expected to provide details of the sub-contractors for the work which is allowed as mentioned in the clause. Use of personnel not on payroll of the SI shall be considered as sub-contracting.

The SI shall take prior approval from SSCDL for sub-contracting any allowed work as mentioned in clause, if not already specified in the proposal and approved by SSCDL. Such sub-contracting shall not relieve the SI from any liability or obligation under the Contract. The SI shall solely responsible for the work carried out by subcontracting under the contract.

d) Care to be taken while working at Public Place

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

SI 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 Labor regulations

The SI shall pay fair and reasonable wages to the workmen employed by him, for the contract undertaken by him and comply with the provisions set forth under the Minimum wages Act and the Contract Labor Act 1970.

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 or by email or by fax.

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

SSCDL:

Chief Executive Officer, Surat Smart City Development Ltd. 1st Floor, South Zone Office, Surat Municipal Corporation, Opp. Satyanagar, Udhna, Surat-394210, Gujarat, India

Tel: 0261 2277429 Fax: 0261 2277043

Systems Integrator:				
	Tel:			

i) Performance Guarantee

The SI shall submit performance guarantee which is unconditional & irrevocable equal to 3% of the order value of the contract in the format prescribed in RFP issued by any Bank as per approved list of Banks mentioned in Annexure VI of this RFP. The performance guarantee shall be valid for the term agreement & shall be renewed & maintained by the SI for the term of the agreement & extension, if any. The performance guarantee shall be forfeited / liquidated by the SSCDL as a penalty in the event of failure to complete obligations or breach of any of the conditions by the SI.

j) Personnel/Employees

- i. Personnel/employees assigned by System Integrator to perform the services shall be employees of System Integrator or its sub-contractors(only for permitted activities), & under no circumstances will be considered as employees of SSCDL. System Integrator 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. The SSCDL shall not be responsible for the above issues concerning to personnel of System Integrator.
- ii. System Integrator shall use its best efforts to ensure that sufficient System Integrator personnel are employed to perform the Services, & that, such personnel have appropriate qualifications to perform the Services. SSCDL or its nominated agencies shall have the right to require the removal or replacement of any system Integrator personnel performing work under this Agreement. In the event that SSCDL requests that any System Integrator 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 SSCDL or its nominated agencies, within not later than 30 working days. System Integrator shall depute quality team for the project & as per requirements, SSCDL shall have the right to ask System Integrator to change the team.

- iii. Management (Regional Head / VP level officer) of System Integrator 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 System Integrator in the technical proposal, which are considered for Technical bid evaluation, shall be construed as 'Key Personnel' & the System Integrator shall not remove such personnel without the prior written consent of SSCDL. For any changes to the proposed resources, System Integrator shall provide equivalent or better resources (in terms of qualification & experience) in consultation with SSCDL.
- v. Except as stated in this clause, nothing in this Agreement will limit the ability of System Integrator freely to assign or reassign its employees; provided that System Integrator shall be responsible, at its expense, for transferring all appropriate knowledge from personnel being replaced to their replacements. SSCDL shall have the right to review & approve System Integrator's plan for any such knowledge transfer. System Integrator 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.

k) 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.

l) Severability & Waiver

- a. 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 any illegal, invalid or unenforceable provision with 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.
- b. 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.

m) Entire Agreement

This MSA, the SLAs & all schedules appended thereto & the contents & specifications of the RFP subsequent corrigenda issued thereon & clarification (undertakings) accepted by the SSCDL constitute the entire agreement between the Parties with respect to their subject matter.

n) 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.

o) The stamp duty payable for the contract shall be borne by the Systems Integrator.

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 Surat courts only.

IN WITNESS WHEREOF the common seal of the Company has been hereinto affixed in the

presence of CEO /Director/GM (IT) of the Company has hereinto set their hands and sealed and signature of the System Integrator has been herein affixed this day and year above written.

Signed, sealed and delivered by ________ in the presence of:

Witnesses:

(1)________

(2)_______

Chief Executive Officer Surat Smart City Development Ltd

	seal of the Comp and (2) member				20_	in
(1)						
(2)						
(Any two men	bers of the Proj	ect Managemen	t Committee o	f Surat Smart Ci	ity Development I	∡td

20Annexure IV - Format for Bank Guarantee for Bid Security (Earnest Money Deposit)

(To be printed on Rs. 300/- Stamp Paper)

This	Deed	of	Guarante	e is	made	on	this		day	of _	,	2022 at
	O.CC.	/D •	by			-		a _		1 000	Bank and ice at	having its
Head	Office/	'Regi	stered Off	ce at	úl D	1 22	% :1	anc	l a Branc	ch Offi	ice at	
									-		xpression shall	
			Smart	City	Develop	men	t Ltd	l (SSC	DL),hav	ving i	successors and its Registered to as "Author	Office at
_	ssion s			e repi	ugnant	to the	e subj	ect or o	context	hereo	f be deemed to	include its
most of En Proje	desirab terprise cts of S	ole fin e Ma Surat	rm/compa nagement	ny foi Syste il Cor	Selecti m & Bu	on of sines	f Impl s Inte	ementa lligence	ation Ag e Softwa	ency f ire Sol	lding in order t for Design & De lution for Surat 7 issued a RFP	evelopment City BRTS
	-	_	ne of Bidde of the Wo							s subn	nitted his Bid d	ated [date]
	e event ender d		•	r non	-perfor	mano	ce of th	ne follo	wing te	rms ar	nd conditions c	ontained in
	If the I Tender		er withdrav	ws or	modifie	s his	Bid d	uring t	he perio	d of B	id validity spec	eified in the
(2)	If the	Bidd	er refuses	to acc	ept the	corre	ection	of erro	rs in his	Bid; o	or	
(3)		er B	idders wh							•	the competitive and/or is not a	-
(4)	the p	erio	-	alidit	y and t	he b	idder	_			y the AUTHOR execute the Ag	_
(5)	If th	e bid	lder engag	es in f	raudule	nt or	corru	pt prac	ctices			
			_	-		-				_	rantees and un EMD in INR) v	

protest or demur and upon receipt of first written demand from AUTHORITY, without having to substantiate his demand, provided that in his demand AUTHORITY will note that the amount claimed by him is due to him owing to the occurrence of any one or more of the conditions,

specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date (180 days) days beyond the original validity period for the bid or as it may be extended by the bidder on a written request by AUTHORITY, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.
The jurisdiction in relation to this Guarantee shall be the Courts at Surat and Indian Law shall be applicable.
The claim in respect of this Bank Guarantee shall be admissible at any of our Surat Branches and such Bank Guarantee is encashable at Surat Branch.
IN WITNESS WHEREOF the Guarantor has executed this Guarantee on this day ofand year first herein above written.
Signed and delivered by the
above namedBank by
its Authorized Signatory as authorized by
Board Resolution passed on/
Power of Attorney dated []
Authorized Signatory
Name :
Designation:
In the presence of:
1.
2.

21 Annexure V - Format for Performance Bank Guarantee (PBG)

<< To be printed on Rs. 300/- Stamp Paper >>

<< To be printed on Rs. 300/- Stamp Paper >>

for
SURAT Smart City Development Corporation (SSCDL) for Selection of Implementation Agency for Design & Development of Enterprise Management System & Business Intelligence Software Solution for Surat City BRTS Projects of Surat Municipal Corporation (hereinafter referred to as the "said work") on the terms and conditions of the AGREEMENT/Letter of Intent ("LOI") dated the
The Company has agreed to furnish SSCDL in Guarantee of the Nationalized Bank for the sum of Rs <pbg amount="" and="" figures="" in="" words=""> only which shall be the Security Deposit for the due performance of the terms covenants and conditions of the said AGREEMENT. We <name bank="" of=""> Bank Registered in India under Act and having one of our Local Head Office at <address bank="" of=""> do hereby guarantee to SSCDL in.</address></name></pbg>
Due performance and observances by the Company of the terms covenants and conditions on the part of the Company contained in the said AGREEMENT, AND
Due and punctual payment by the Company to SSCDL of all sum of money, losses, damages, costs, charges, penalties and expenses that may become due or payable to SSCDL by or from the Company by reason of or in consequence of any breach, non-performance or default on the part of the Company of the terms covenants and conditions under or in respect of the said AGREEMENT.
AND FOR THE consideration aforesaid, we do hereby undertake to pay to SSCDL on demand without delay demur the said sum of Rs (Rupees

such lesser sum, as may be demanded by SSCDL from us as and by way of indemnity on account of any loss or damage caused to or suffered by SSCDL by reason of any breach, non-performance or default by the Company of the terms, covenants and conditions contained in the said AGREEMENT or in the due and punctual payment of the moneys payable by the Company to SSCDL thereunder and notwithstanding any dispute or disputes raised by the Company in any suit or proceeding filed before the Court relating thereto our liability hereunder being absolute and unequivocal and

irrevocable AND WE do hereby agree that -

The guarantee herein contained shall remain in full force and effect during the subsistence of the said AGREEMENT and that the same will continue to be enforceable till all the claims of SSCDL are fully paid under or by virtue of the said AGREEMENT and its claims satisfied or discharged and till SSCDL certifies that the terms and conditions of the said AGREEMENT have fully and properly carried out by the Company.

We shall not be discharged or released from liability under this Guarantee by reason of any change in the Constitution of the Bank or

any arrangement entered into between SSCDL and the Company with or without our consent; any forbearance or indulgence shown to the Company,

any variation in the terms, covenants or conditions contained in the said AGREEMENT; any time given to the Company, OR

any other conditions or circumstances under which in a law a surety would be discharged.

We shall not revoke this guarantee during its currency except with the previous consent of SSCDL in writing;

SSCDL shall have the fullest liberty and the Bank hereby gives its consent without any way affecting this guarantee and discharging the Bank/Guarantor from its liability hereunder, to vary or modify the said AGREEMENT or any terms thereof or grant any extension of time or any facility or indulgence to the Company and Guarantee shall not be released by reason of any time facility or indulgence being given to the Company or any forbearance act or omission on the part of SSCDL or by any other matter or think whatsoever which under the law, relating to sureties so releasing the

guarantor and the Guarantor hereby waives all suretyship and other rights which it might otherwise be entitled to enforce.

That the absence of powers on the part of the Company or SSCDL to enter into or execute the said AGREEMENT or any irregularity in the exercise of such power or invalidity of the said AGREEMENT for any reason whatsoever shall not affect the liability of the Guarantor/Bank and binding on the bank notwithstanding any abnormality or irregularity,

The Guarantor agrees and declares that for enforcing this Guarantee by <SSCDL> against it, the Courts at Surat only shall have exclusive jurisdiction and the Guarantor hereby submits to the same

	1
	2
_	respectively the Director of the Company, who in token thereof, has hereto set his ive hands in the presence of –
	1
	2

22 Annexure VI- Approved List of Banks

Under this contract, wherever the contractor is required to submit F.D.R., bank guarantee, etc. against payment towards any deposit or advance e.g., EMD,SD, etc. Such F.D.R, bank guarantees, etc. shall be produced from any one of the following Nationalized Bank as listed below:

- 1. AU Small Finance Bank
- 2. Ahmedabad Mercantile Co-Operative Bank Limited
- 3. Axis Bank
- 4. City Union Bank
- 5. DBS Bank India Limited
- 6. DCB Bank
- 7. Equitas Small Finance Bank
- 8. Federal Bank
- 9. HDFC Bank
- 10. ICICI Bank
- 11. IndusInd Bank
- 12. Kalupur Commercial Co-Operative Bank Limited
- 13. Kotak Mahindra Bank
- 14. Nutan Nagrik Sahakari Bank Limited
- 15. Rajkot Nagarik Sahakari Bank Limited
- 16. RBL Bank
- 17. Saraswat Co-Operative Bank
- 18. Saurashtra Gramin Bank
- 19. Standard Chartered Bank
- 20. Tamilnadu Mercantile Bank
- 21. The Gujarat State Co-Operative Bank
- 22. The Mehshana Urban Co-Operative Bank Limited
- 23. The Surat District Co-Operative Bank
- 24. The Surat Peoples Co-Operative Bank
- 25. Ujjivan Small Finance Bank