



Vadodara Smart City Development Ltd.

BID DOCUMENT

for

Selection of Implementation Agency for ICT
Upgradation of Fire Stations and ICT enabled Fire
Services in Vadodara City - Fourth Attempt

Issued By

Vadodara Smart City Development Limited (VSCDL)

Vadodara

Table of Contents

1. Glossary.....	6
2. Notice Inviting Bid.....	8
3. Important Dates.....	10
4. Introduction and Background	12
4.1. About Vadodara	12
4.2. About VMC.....	12
4.3. About Vadodara Smart City Development Limited (VSCDL).....	12
4.4. Project Background	13
4.5. Project Objective.....	13
4.6. Tender Notice	14
5. Pre-Qualification Criteria	15
6. Instructions to Bidder.....	18
6.1. Purpose of Bid Document	18
6.2. Proposal Preparation Cost	18
6.3. Pre-Bid Meeting.....	18
6.4. Amendment of RFP Document.....	19
6.5. Conflict of Interest.....	19
6.6. Consortium Condition.....	20
6.7. Right to Amendment of Project Scope	21
6.8. VSCDL's Rights to Terminate Selection Process	21
6.9. Right to Reject Any Proposal	21
6.10. Tender Fee and Earnest Money Deposit (EMD)	22
6.11. Sealing, Marking and Submission of Bids.....	22
6.12. Language of Bids	24
6.13. Concessions Permissible under Statutes.....	24
6.14. Bid Validity	24
6.15. Taxes.....	24
6.16. Firm Prices and Bid Currency.....	24
6.17. Right to Vary the Scope of the Work at the Time of Award	24
6.18. Modification or Withdrawal of Bids	25
6.19. Evaluation Process	25
6.20. Opening of Technical Bid	25
6.21. Evaluation of Technical Bids	25
6.22. Technical Evaluation Criteria	26
6.23. Opening of Commercial Bid.....	30
6.24. Evaluation of Commercial Bids and Selection Method	30
6.25. OEM / Implementation Partner Participation Criteria.....	31
6.26. Rights to Accept/Reject Any or All Proposals.....	32
6.27. Notifications of Award and Signing of Contract	32
6.28. Quantity Variation	32
6.29. Performance Bank Guarantee.....	32
6.30. Vandalism/Force Majeure	33
6.31. Failure to Agree with the Terms & Conditions of the Bid Document/ Contract.....	33
6.32. Terms and Conditions of the Tender.....	33
7. Scope of Work.....	34
7.1 Geographical Scope	35

7.2	Supply, Installation, Configuration/Customization of Software	35
7.3	Integration of Software with other applications	36
7.4	Deliverables	38
7.5	Hosting at Smart Data Centre in CCC	38
7.6	Testing & Quality Adherence	40
7.7	Training.....	42
7.8	Manpower Support for Change Requests	43
7.9	Handholding Support.....	43
7.10	Preventive Maintenance & Monitoring of Application.....	44
7.11	Civil Works.....	46
7.12	Inspection, Testing and Maintenance of Devices	46
7.13	Compliance with National and International Standards	46
7.14	Creation of new Standard Operating Procedures (SOPs) or modification of existing SOPs.....	47
7.15	Equipment & Material.....	47
7.16	Wires	47
7.17	Network Interface.....	47
7.18	Responsibility Matrix	48
8.	Work Completion Timeline and Payment Terms	51
9.	Service Level Agreements	56
9.1	Professional Project Management.....	63
9.2	Use and Acquisition of Assets during the term.....	64
9.3	Security and safety.....	64
9.4	Indemnity.....	65
9.5	Third Party Claims.....	65
9.6	Publicity	66
9.7	Warranties	67
9.8	Force Majeure	67
9.9	Resolution of Disputes	68
9.10	Risk Purchase Clause.....	68
9.11	Limitation of Liability towards VSCDL.....	68
9.12	Conflict of Interest.....	69
9.13	Data Ownership	69
9.14	Fraud and Corruption	69
9.15	Exit Management	69
9.16	Termination of contract	71
9.17	Miscellaneous	71
9.18	Applicable Law.....	76
9.19	Additional Security Deposit	76
9.20	Compensation for Delay.....	77
9.21	Action on Complete Forfeiture of Security Deposit.....	77
9.22	Stamp Duty Payment.....	78
10.	Annexure I: Formats for Pre-Qualification Bid	80
10.1	Bid Cover Letter.....	80
10.2	Pre-Qualification Documents Checklist	81
10.3	PQ_1: Bank Guarantee for Earnest Money Deposit (EMD)	82
10.4	PQ_2: Bidder Information Format	84
10.5	PQ_3: Power of Attorney for Lead Member of Consortium (In case of Consortium).....	86
10.6	PQ_4: Lead Bidder's and Consortium Partner's Turnover Details and Net Worth	88
10.7	PQ_5: Experience of Automatic Vehicle Tracking	90
10.8	PQ_6: Experience of Implementing CAD Software Projects.....	92
10.9	PQ_7: Self Declaration – No Blacklisting	94

10.10 PQ_8: Self Declaration – Bidder Not Terminated, Not Being Insolvent or In Receivership or Bankrupt	95
11. Annexure II: Formats for Technical Bid	96
11.1 General Instructions for Preparation of the Technical Proposal	96
11.2 Documents Checklist for Technical Bid	98
11.3 TQ_1: Lead Bidder's and Consortium Partner's Turnover Details and Net Worth.....	99
11.4 TQ_2: Experience of Implementing Automatic Vehicle Tracking	101
11.5 TQ_3: Experience of Implementing CAD Software Business.....	103
11.6 TQ_4: Undertaking for Technically Qualified Full-time Professionals on Company's Payroll	105
11.7 TQ_5: Undertaking for Manpower Deployed on Project.....	106
11.8 TQ_6: CVs of the Manpower Proposed.....	107
11.9 TQ_7: Format for Authorization Letters from OEMs	108
12. Annexure III: Commercial Bid Format and Instructions	109
12.1. General Instructions.....	109
12.2. Commercial Bid Cover Letter.....	110
12.3. Commercial Bid Format and Instructions	112
12.4. Schedule S: Summary of Cost Estimate	112
12.5. Schedule A: Fire Detection and Monitoring Equipment with Installation	113
12.6. Schedule B: Fire Tender and Other Vehicle Equipment	115
12.7. Schedule C: Application Development and Configuration.....	115
12.8. Schedule D: IT and Fire Audit compliance before Go Live.....	116
12.9. Schedule E: Training	117
12.10. Schedule F: DC Infrastructure.....	117
12.11. Schedule G: AMC	119
12.12. Schedule H: Communication Cost.....	119
12.13. Schedule I: Manpower.....	121
13. Annexure IV: Master Service Agreement	124
13.1 Master Service Agreement	124
14. Annexure V: List of Products/Solutions which require MAF and OEMs.....	140
14.1. List of Products/Solutions Which Requires MAF from OEMs	140
15. Annexure VI: Change Management Procedure & CCN	141
15.1. Change Management Procedure.....	141
15.2. Change Order.....	142
15.3. Format of Change Control Note (CCN)	143
16. Annexure VII: List of Locations.....	145
16.1. Fire Stations	145
17. Annexure VIII: Software Functional Requirements.....	146
17.1 Computer Aided Dispatch.....	146
17.2 Monitoring Application Features	165
17.3 Local Monitoring Station Features.....	166
17.4 Central Monitoring Station Features	166
17.5 Integration with CCC Workstation and LED TV (Kept at Fire Control Room at CCC).....	166
17.6 Integration with IBM IOC Solution of CCC Project.....	167
17.7 Integration with Helpdesk & Call management Solution of CCC Project	167
17.8 Integration with AVLS solution of ITMS Project.....	167
17.9 Water Level Equipment on River Side	167
18. Annexure IX: Technical Specifications for Detection Equipment's	169

18.1	Firewall for Smart DC.....	169
18.2	L3 Switch for Smart DC.....	Error! Bookmark not defined.
18.3	Wireless Addressable Central Monitoring Station	170
18.4	Wireless Addressable Local Monitoring Station.....	170
18.5	L2 Switch for Fire Station	171
18.6	Water Level Equipment for Monitoring Water Level of River	172
18.7	Water Level Sensor with Router for Fire Tenders	172
18.8	POS machine for Water tankers	172
18.9	Incidental Civil and Electrical work at sites	173
18.10	GPS Units for Fire Tenders and other vehicles.....	173
18.14	Mobile Data Terminal for Fire Tenders	173
18.15	Mobile NVR for Fire Tenders.....	174
18.16	Fix Minidome Camera for Fire Tenders	174
18.12	3G/4G Router in Fire Tender	175
18.13	Rack Server	176
18.14	TOR Switch	176
18.15	San Storage	177
18.16	Smart Rack.....	178
18.17	Structured Cabling.....	179
18.18	PVC Conduit.....	179
18.19	Wiring.....	180
18.20	Cable Work.....	180
18.21	Networking Standards.....	181

1. Glossary

Sr. No	Acronym	Description
1	ACD	ACD Automatic Call Distribution
2	ATR	ATR Action Taken Reports
3	AVLS	AVLS Automatic Vehicle Location Systems
4	BID	Bid Offer by the Bidder to fulfil the requirement of VSCDL for an agreed price. It shall be a comprehensive technical and commercial response to the RFP
5	BIDDER	Bidder shall mean organization or consortium submitting the proposal in response to this RFP
6	BOM	BOM Bill of Material
7	BOQ	BOQ Bill of Quantity
8	VSCDL	Vadodara Smart City Development Ltd.
9	CAD	CAD Computer Aided Dispatch
10	CONSORTIUM	Consortium A consortium consists of two members (Lead Bidder + 1 Consortium member) entering into a Consortium Agreement for a common objective of satisfying requirements as per scope
11	CONTRACT	Contract entered by VSCDL with selected bidder as per the RFP
12	COTS	Commercial Off The-Shelf (COTS) COTS refers to software products that are ready-made and available for sale, lease, or license to the general public
14	Data Centre	Data Centre Site means the DC sites including their respective Data Centre space, Communications Room wherein the delivery, installation, integration, management and maintenance services as specified under the scope of work are to be carried out by selected bidder.
15	DC	DC Data Centre
17	EFFECTIVE DATE	Effective Date The date on which the Contract Agreement for this RFP comes into effect
18	EMD	EMD Earnest Money Deposit
19	EMERGENCY SERVICES	Emergency Services The organizations that respond to and deal with emergencies when they occur. For the context of this RFP, Emergency Services pertain handling
20	ERS	ERS Emergency Response System
21	ERV	Emergency Response Vehicle
22	FRS	Functional Requirement Specification
23	GCC	GCC General Conditions of Contract
24	GIS	GIS Geographic Information System

25	GO-LIVE	Go-Live means commissioning of project after installation of all hardware, software, deployment of manpower including training etc. as per scope of work.
26	GPRS	General Packet Radio Service
27	GPS	Global Positioning System
28	GUI	Graphical User Interface
29	HHD	HHD Hand-held Device
30	KPI	Key Performance Indicators
31	LBS	Location Based System
32	MDT	MDT refers to Mobile Data Terminal – an Android/Windows/IOS based device that displays GIS maps and dispatch related information.
33	NOC	NOC/SOC A Network Operations Centre (NOC) / Security Operations Centre is defined as the place from which the networks and system security are supervised, monitored and maintained. It typically is a room containing visualizations of the networks and security components that are being monitored, workstations at which the detailed status of the network/security status can be seen, and the necessary software to manage the same.
34	O&M	Operations & Maintenance
35	OEM	Original Equipment Manufacturer of any equipment or system or software or product which are providing such goods to VSCDL under the scope of this RFP
36	RTO	Recovery Time Objective
37	RPO	Recovery Point Objective
38	SERVICE LEVEL	Service Level The level of service and other performance criteria which will apply to the Services delivered by the system integrator
39	SI	System Integrator
40	SOA	Service Oriented Architecture
41	SOP	SOP Standard Operating Procedure
42	SRS	SRS Software Requirement Specifications
43	SUCCESSFUL BIDDER	The bidder who is qualified & successful in the bidding process and is awarded the work
44	TRAI	Telecom Regulatory Authority of India
45	TSP	Telecom Service Provider

2. Notice Inviting Bid



Vadodara Smart City Development Limited (VSCDL)
C/o Vadodara Municipal Corporation, Khanderao Market, Vadodara

Notice Inviting RFP for **“Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city – Fourthe Attempt”**

Bid for IT upgradation of Fire stations and ICT enabled fire services in Vadodara city is invited online on (n) Procure website (<https://vmc.nprocure.com/>) from the bidder meeting the basic eligibility criteria as stated in the bid document.

RFP Document Availability	(n)Procure website (https://vmc.nprocure.com/)
Tender Fee (Non-refundable)	Tender Fee of INR 10,000/- (Rupees Ten Thousand Five Hundred only) plus GST @18% by Demand Draft
EMD	EMD of INR 12,30,000/- (Rupees Twelve Lakhs and thirty thousand only) shall be either in form of <ul style="list-style-type: none"> • Demand Draft in favour of “Vadodara Smart City Development Limited” from any nationalized/scheduled banks, payable at Vadodara OR • Bank Guarantee issued by Nationalized Bank including IDBI Bank/Private Banks – Axis Bank, HDFC Bank and ICICI Bank along with banks mentioned in the GR of Finance Department of Government of Gujarat (GR No: EMD/10/ 2015/508/DMO dated 27.04.2016) only in favour of “CEO, Vadodara Smart City Development Limited”.
Start date and time for downloading RFP	17 th September 2019, 1700 hrs onwards
Deadline for submission of pre-bid queries for clarifications	23 rd September at 2019 at 1000 Hrs
Date, time and place of pre-bid meeting	23 rd September at 2019 at 1600 Hrs <i>Place:</i> Conference Room, Vadodara Municipal Corporation, Khanderao Market, Vadodara – 390001, Gujarat
Deadline for submission of Proposal and EMD, online	14 th October 2019 at 1800 Hrs
Deadline for physical submission of technical Proposal, Tender Fee and EMD	15 th October 2019 at 1700 Hrs

Contact for queries

IT Department, Vadodara Smart City Development Limited, C/o
Vadodara Municipal Corporation Khanderao Market, Vadodara
– 390001, Gujarat

Email ID: smartcity_itcell@vmc.gov.in

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

General Manager (IT)
Vadodara Smart City Development Limited

3. Important Dates

#	Information	Details				
	Project Name/ Name of Work	Selection of Implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city				
	Publication of Request for Proposal	17 th September 2019				
	Website to download RFP	(n)Procure website (https://vmc.nprocure.com/)				
	RFP Fees	Tender Fee of INR 10,000/- (Rupees Ten Thousand only) plus GST @18% by Demand Draft				
	EMD Amount	EMD of INR 12,30,000/- (Rupees Twelve Lakhs and thirty thousand only),shall be either in form of Demand Draft in favour of “Vadodara Smart City Development Limited” from any nationalized/scheduled banks, payable at Vadodara OR Bank Guarantee issued by Nationalized Bank including IDBI Bank/Private Banks – Axis Bank, HDFC Bank and ICICI Bank along with banks mentioned in the GR of Finance Department of Government of Gujarat (GR No: EMD/10/ 2015/508/DMO dated 27.04.2016) only in favour of “CEO, Vadodara Smart City Development Limited”.				
	Deadline for submission of pre-bid queries for clarifications	23 rd September at 2019 at 1000 Hrs				
	Date, time and place of pre-bid meeting	23 rd September at 2019 at 1600 Hrs Place: Conference Room, Vadodara Municipal Corporation, Khanderao Market, Vadodara – 390001, Gujarat				
	Deadline for submission of Proposal and EMD, online on (n)Procure	14 th October 2019 at 1800 Hrs				
	Deadline for physical submission of Technical Proposal (1 Copy), Tender Fee and EMD	15 th October 2019 at 1700 Hrs				
	Account Details for EMD (BG as EMD)	Account details for Bank Guarantee are as follows: <table><tr><td>Account Title</td><td>Vadodara Smart City Development Limited</td></tr><tr><td>Account No.</td><td>000994600002203</td></tr></table>	Account Title	Vadodara Smart City Development Limited	Account No.	000994600002203
Account Title	Vadodara Smart City Development Limited					
Account No.	000994600002203					

#	Information	Details	
		Customer ID	5584156
		Bank Name	YES Bank
		Branch Name	Race Course, Vadodara
		IFSC Code	YESB0000009
		MICR Code	390532002
		Branch Code	0009
		Bank Address	YES Bank Limited, Corner Square Building, Near Inox Cinema, Race Course Circle, Hari Nagar, Vadodara, Gujarat 390007
	Addressee and address for the EMD	Addressee for the EMD: The CEO, Vadodara Smart City Development Limited (VSCDL) Address: Vadodara Municipal Corporation, Record Branch, Khanderao Market, Vadodara – 390209, Gujarat	
	Date, time and place of online opening of Technical Proposals	To be informed later. Place: VSCDL, C/o Vadodara Municipal Corporation	
	Date, time and place of presentation/demo on Technical Solution by bidders	To be informed later. Place: VSCDL, C/o Vadodara Municipal Corporation	
	Date, time and place of online opening of Financial Proposals	To be informed later. Place: VSCDL, C/o Vadodara Municipal Corporation	
	Contact for queries	IT Department, Vadodara Smart City Development Limited, C/o Vadodara Municipal Corporation Khanderao Market, Vadodara – 390001, Gujarat Email ID: smartcity_itcell@vmc.gov.in	

4. Introduction and Background

4.1. About Vadodara

Located in western part of India in the state of Gujarat, Vadodara (formerly known as Baroda) is referred as cultural capital of Gujarat and is the third largest city after Ahmedabad and Surat. It is the administrative headquarters of Vadodara District and is located on the banks of the Vishwamitri River.

As per the Census 2011, Vadodara has a population of almost 1.7 million+ people. The city is an important industrial, cultural and educational hub of western India and has the largest university in Gujarat, the Maharaja Sayajirao University of Vadodara. The city houses several institutions of national and regional importance while its major industries include petrochemicals, engineering, chemicals, plastics, IT and pharmaceuticals and foreign exchange services amongst others.

Vadodara has also been selected as one of the sixty Indian cities (in the Second round of selection) to be developed as a smart city under Smart Cities Mission.

4.2. About VMC

In 1947, when India became Independent, the princely state of Baroda was merged into the Bombay state in 1949. The municipal administration was functioning as per the provisions of the Bombay District Municipal Act. In 1951 however, the city administration came under the guidelines of Baroda Municipal Act.

On 1st April 1951, Vadodara (Erstwhile Baroda) got the status of the Municipal Corporation and hence the Gujarat Provincial Municipal Corporation (GPMC) Act was enforced. Ever since then the Municipal administration is run as per the provisions of the GVMC Act.

Vadodara has 12 administrative wards and 19 election wards. Each election ward is represented by four councillors of which two are lady councillors. Thus, the total number of Municipal councillors is 76. The election is held once in five years and the Mayor's tenure is maximum of 2½ years. While the Mayor is the head of the elected body, the administrative head is the Municipal Commissioner who is assisted by Deputy Municipal Commissioners and several other officers including city engineer, chief accountant and ward officers. Each administrative ward is headed by the ward officer who is responsible for efficient and smooth functioning of revenue collection, sanitation and implementation of certain government schemes and he reports to the Asst. Municipal Commissioner (Zone). There are two Deputy Engineers in each ward who are equivalent in grade to the ward officer and look after water supply and drainage functioning. These engineers work under direct supervision of an Executive Engineer (Zone).

More information: <https://www.vmc.gov.in/>

4.3. About Vadodara Smart City Development Limited (VSCDL)

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

4.4. Project Background

The number of Fire incidents recorded in recent years has been steadily rising in Vadodara. Traditional methods of fire detection & communication have proven to be ineffective during time of fire incidents. Currently, there is no system linking existing systems in buildings to fire brigade stations for instant communication during fire incident. Consequently, the response from the fire brigade is delayed resulting in increased loss of life and property.

Furthermore, the conventional detection systems are outdated and are unable to accurately pinpoint exact location in building where fire has taken place. There are no modern systems to detect fire at certain critical infrastructure / assets by connecting the system to remote monitoring station.

The fire brigade personnel usually do not possess precise information of building (and its surroundings) in which the fire incident has taken place. Therefore, precious time is wasted in locating building and identifying resources in vicinity which could be utilized to tackle fire. There is no system of providing simultaneous alerts immediately after detection of fire to fire brigade, hospitals, police and other relevant govt. personnel to enable coordinated response to the fire disaster.

It is therefore necessary to have an intelligent, secure, robust, fool proof and scalable system of fire detection and communication to ensure rapid and effective disaster management.

Apart from that VMC does not have any mechanism to track Fire Tenders, Water Tankers, Water levels in Fire Tenders and Ambulances. VMC wants to bring all these vehicles in the fold of ICT enabled upgradation of Fire Stations and ICT enabled Fire Services closely integrated with City Command and Control Centre for effective tracking and transparency.

4.5. Project Objective

- The main objective of this project is to implement an integrated solution for Caller Location tracking, Automatic Vehicle Location Software, GPS for Fire tenders, Water Tankers and Ambulances with centralized monitoring at Control Room for Emergency and Fire Services located in Command and Control Centre.
- GPS enabled Fire tenders, Water Tankers and Ambulances to facilitate quick response from relevant departments to reach place of incident in shortest possible time and keep track of all such vehicles centrally through Control Room. System should automatically send coordinates of the caller to the Control Room and nearest Fire tender/Fire Station.
- Water level sensors to monitor water levels in Fire Tenders and POS machine for Water Tankers.
- To establish a reminder system for renewal of Fire safety licenses issued by Fire Department through SMS's and emails. SMS and Email Gateway will be provided.
- Enable effective communication between Fire tenders, Fire Stations and Control Room by implementing a Centralized Monitoring Station (CMS) installed at Control Room located in Command and Control Centre of the VSCDL.
- Provide a Central Monitoring Station (CMS) that would give an overview of the entire city limits under VMC with incident tracking, timestamp-based event logging and recording of various events.
- Live Video system to Monitor and Guide Fire tenders from Control Room. NVRs to be installed in Fire Tenders shall be used to record feed from cameras.

4.6. Tender Notice

This tender Document is being published by Vadodara Smart City Development Ltd. for the Project “***Selection of implementing Agency for ICT Upgradation of Fire stations and ICT Enabled Fire Services in Vadodara city***”. Bidder agencies are advised to study this tender document carefully before submitting their proposals in response to the Tender Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

This tender document is not transferable.

5. Pre-Qualification 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 to successfully provide System Integration, Operation and Maintenance services sought by Vadodara 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:

#	Eligibility Criteria	Document Proof
	<p>The bidder (the sole bidder or lead bidder, in the case of consortium) must be either a company registered under the Indian Companies Act 1956 (& subsequent relevant amendments) or a Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008 and should be operational at least for last 5 years as on date of publishing of RFP.</p> <p>In case of consortium: the consortium partner can be either a company registered under the Indian Companies Act 1956 or a Partnership Firm registered under Indian Partnership Act 1932 or a Proprietorship Firm or a Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008 and be operational at least for last 5 years as on date of publishing of RFP</p> <p>Or</p> <p>a foreign company constituted under respective foreign law and be operational at least for last 5 years as on date of publishing of RFP</p> <p><i>Consortium to be restricted to max. 3 firms (including the lead bidder).</i></p>	<p>Certificate of Incorporation / registration under Indian Companies Act 1956 or certified copy of partnership deed</p> <p>For global companies, equivalent certificate in the country of incorporation (certificate, in language other than English, shall be accompanied by an English translation)</p> <p>Consortium agreement clearly stating the roles and responsibilities of each member</p>
	<p>The bidder (lead bidder, in case of consortium) should have a positive net worth and should be a profit making company, as on 31 March 2018.</p>	<p>Certificate from the statutory auditor/CA clearly specifying the net worth of the firm (to be provided by each consortium member in case of consortium)</p> <p>Audited Balance Sheet (to be provided by each consortium member in case of consortium)</p>

		Audited Profit & Loss Statement (to be provided by each consortium member in case of consortium)
	The bidder should have an average annual turnover of Rs. 17 crores from systems installation, integration/software development & maintenance business, ICT projects in the last three years (Financial Years: 2016-17, 2017-18 and 2018-19).	Copy of the audited Profit and Loss Statement of the company and Certificate from the Chartered Accountant clearly stating the turnover is at least Rs. 17 crores from systems installation/integration, software development & maintenance business.
	The bidder / any member of consortium should have experience in implementing at least one integrated ICT project in last five years in India, for any Central Government Department, State Government Department/Educational Institute or any PSU, having value over 5 crores.	Copy of Work Order and Work Completion Certificate (in case of completed projects) signed by a competent authority clearly stating the scope and contact details of the reference person. In case completion certificate is not available, self-certification of Go-Live need to be submitted.
	The bidder must have at least 20 graduate technical employees on its payroll at the time of bidding, performing installation / development/ testing / maintenance activities.	Certificate from HR head of bidder
	The bidder should possess a valid ISO 9001:2008 certificate or above	Copy of valid certificate
	The Bidder should have valid Income Tax returns for the last three financial years (i.e. 2016-17, 2017-18 and 2018-19) and the Bidder (not individual) should have PAN Card	Provide documentary proof of Income Tax returns for the last three financial years. Provide copy of PAN card
	The Bidder should have valid documentary proof of GST registration number	Copy of GST registration number
	The Bidder should not have been blacklisted by Central Government or any State Government Organization / Department in India at the time of submission of the bid.	Declaration by the Bidder as per format given in the bid document

Notes:

- For a bidder, who is having more than 75% shareholding (stake) of foreign parent company, the turnover, net-worth and project experience (IN THE SAME DOMAIN) of parent company shall also be considered for tender evaluation purposes. For this, support letter(s) from parent company on their letterhead (Notarised copy) to be provided. If any false information is submitted, the bidder shall be subjected to disqualification and possible black-listing,
- The bidder/lead bidder must attach valid documents and undertakings in support to their Technical and Financial capabilities/strength, as mentioned above. Without proper and complete supporting documents, the Bid proposals are liable to be rejected.

- The bidder/lead bidder should submit Manufacturers Authorization Certificate (MAF) from Original Equipment Manufacturers (OEMs) specific to the bid. The bidder/lead bidder should have a back-to-back support agreement/arrangement for services including supply of spare parts etc. with the OEMs which includes the post-sales support activities for the entire project period.
- The MAF is applicable for OEMs of items listed in Annexure C.
- All the proposed equipment should not be declared End-of-Support by the OEMs for next 6 years from the date of bid submission.

6. 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 VSCDL.

6.1. Purpose of Bid Document

1. The purpose of this tender is to select an implementation agency for ICT enabled Upgradation of Fire Stations and ICT enabled Fire Services in Vadodara city as per scope. This document provides information to enable the bidders to understand the broad requirements to submit their 'Bids'.
2. In case a bidding firm possesses the requisite experience and capabilities required for undertaking the work, it may participate in the selection process either individually (the "Sole Firm") or as lead member of a consortium of firms (the "Lead Bidder") in response to this invitation. The term "bidder" means the sole firm or the lead bidder, as the case may be.
3. 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 tender document.
4. The bidder shall be required to submit their bid in three parts –Pre-qualification, Technical Bid and Commercial Bid (in line with instructions in Section 10, Section 11 and Section 12).

6.2. 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 VSCDL 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 VSCDL 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 VSCDL/VMC and may be returned at its sole discretion.

6.3. Pre-Bid Meeting

A prospective bidder requiring any clarification on the RFP Document may submit his queries, via email, to smartcity_itcell@vmc.gov.in on or before the deadline given in the RFP.

1. VSCDL will host a Pre-Bid meeting for queries (if any) by prospective bidders. The representatives of the bidders may attend the Pre-Bid meeting at their own cost. The purpose of the Pre-Bid meeting is to provide a forum to the bidders to clarify their doubts/seek clarification or additional information necessary for them to submit their bid. Details of the Pre-Bid meeting are:
 - Date and Time: As indicated earlier in the RFP
 - Venue: Conference Room, Vadodara Municipal Corporation, Khanderao Market, Vadodara – 390001, Gujarat
2. The queries should necessarily be submitted in the following format and should be in Microsoft Excel only (.xls or .xlsx format). Scanned images and any format (including .pdf format) other than Microsoft Excel will not be accepted.

3.

Request for Clarification		
Name and Address of the Organization Submitting Request	Name and Designation of Person Submitting Request	Contact Details of the Organization/ Authorized Representative
Organization Name: Address:	Requestor Name: Designation:	Tel: Mobile: Fax: Email:

Sr.	RFP Document (Volume)	Clause/ Section No.	Clause/ Section Title	Page No.	Content of the RFP Requiring Clarification	Clarification Sought

- (PDF or scanned images will not be accepted)
- Queries submitted post the above mentioned deadline or which do not adhere to the above mentioned format may not be responded to. All the responses to the queries (clarifications / corrigendum) shall be made available on the (n)Procure website (<https://vmc.nprocure.com/>).

6.4. Amendment of RFP Document

- At any time before the deadline for submission of bids, the VSCDL, 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.
- The bidders are advised to visit (n)Procure website (<https://vmc.nprocure.com/>) on regular basis for checking necessary updates. VSCDL also reserves the rights to amend the dates mentioned in this RFP for bid process.
- In order to afford prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the VSCDL may, at its discretion, extend the last date for the receipt of bids.

6.5. Conflict of Interest

- A “Conflict of Interest” is any situation that might cause an impartial observer to reasonably question whether System Integrator actions are influenced by considerations of your firm’s interest at the cost of Government. The System Integrator agrees that it shall hold the VSCDL’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 System Integrator foresees a Conflict of Interest, the System Integrator shall notify VSCDL forthwith and seek its approval prior to entering into any arrangement with a third party which is likely to create a Conflict of Interest.
- 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.
- VSCDL requires that the bidder provides professional, objective, and impartial advice and at all times hold the VSCDL’s interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work.
- The System Integrator shall disclose to VSCDL 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.

6.6. Consortium Condition

1. In case of a consortium, a maximum of 3 members (including the lead bidder) shall be allowed.
2. 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.
3. 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.
4. 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 shall be supported by Memorandum of Agreement and Power of Attorney signed by all the members on a stamp paper of INR 100/-.
5. The successful bidder i.e. System Integrator (SI) shall be required to enter into an agreement, with all the members of the consortium, specifying following points. These points shall also be captured in MoU.
 - i. Identity of prime member and Power of Attorney in favour of prime member.
 - ii. Roles and responsibilities of each consortium member, the identification of the lead partner, and providing for joint and several liability for each partner.
 - iii. Both consortium members would be available throughout the Contract Period.
 - iv. Both consortium members shall be jointly and severally liable for due implementation, operation and maintenance of the project.
 - v. 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.
 - vi. 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 (VSCDL) only.
 - vii. The final Contract between the consortium members (The Consortium Contract) would be available for legal vetting and open to suggestions by the VSCDL. VSCDL 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.
 - viii. The Agreement should be on stamp paper and notarized. The signatories must be duly authorized.
 - ix. Any modification in roles and responsibilities between consortium members during Contract period shall be allowed only after approval from VSCDL. 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 VSCDL as it can affect an important public service. Such unilateral action by the SI shall entitle VSCDL to take appropriate action including considering it an Event of Default under this Contract leading to consequences including termination with appropriate notice.
 - x. Any dispute arising during Contract period between the consortium members shall be resolved amicably without adversely impacting project implementation and operation. If in VSCDL's opinion, dispute between consortium members adversely impacting implementation and operation of the project then Authority may in its sole discretion in the interest of the project (a) Terminate the Contract after due process and/or (2) Provide a binding solution.
 - xi. In case VSCDL intends to proceed for Termination on account of SI Event of Defect and/ or unresolved disputes between the consortium members, all 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.
 - xii. VSCDL 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.

•

6.7. Right to Amendment of Project Scope

1. VSCDL retains the right amend the scope of work or amend the program for service delivery at any time and without assigning any reason. VSCDL 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 VSCDL 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 VSCDL to execute a contract or to continue negotiations. VSCDL may terminate negotiations at any time without assigning any reason.

6.8. VSCDL's Rights to Terminate Selection Process

1. VSCDL may terminate the RFP process at any time and without assigning any reason. VSCDL 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 VSCDL.
3. The bidder's participation in this process may result in VSCDL 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 VSCDL to execute a contract or to continue negotiations. VSCDL may terminate negotiations at any time without assigning any reason.

6.9. Right to Reject Any Proposal

1. Notwithstanding anything contained in this RFP, VSCDL 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:

- i. Conditional bids
- ii. If the information provided by the bidder is found to be incorrect/misleading/fraudulent at any stage/time during the tendering process
- iii. Any effort on the part of a bidder to influence the bid evaluation, bid comparison or contract award decisions
- iv. Bids received after the prescribed time and date for receipt of bids
- v. Bids without signature of person (s) duly authorized on required pages of the bid
- vi. Bids without power of attorney/board resolution or its certified true copy

Pre-qualification rejection criteria:

- i. Bidders not complying with the Eligibility Criteria given in this Tender
- ii. Revelation of prices in any form or by any reason before opening the Commercial Bid
- iii. 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

Technical rejection criteria:

- i. Technical Bid containing commercial details
- ii. Revelation of prices in any form or by any reason before opening the Commercial Bid
- iii. 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
- iv. 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
- v. Bidders not complying with the Technical and General Terms and conditions as stated in the Tender documents

- vi. Bidders 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:

- i. Incomplete Price Bid
 - ii. Price Bids that do not conform to the Tender's Price Bid format
 - iii. Total price quoted by the bidder does not include all statutory taxes and levies applicable
 - iv. 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 the bidder is the Lead Member of a consortium, then the entire consortium may be disqualified/rejected. If such disqualification/rejection occurs after the proposals have been opened and the highest ranking bidder gets disqualified/rejected, then VSCDL reserves the right to consider the next best bidder, or take any other measure as may be deemed fit in the sole discretion of VSCDL, including annulment of the selection process.

6.10. Tender Fee and Earnest Money Deposit (EMD)

1. The bidder should pay non-refundable Tender Fee of INR 10,000/- (Rupees Ten Thousand only) plus GST, by Demand Draft in favour of "Vadodara Smart City Development Limited", from nationalized or scheduled banks, payable at Vadodara. The Bid Fees shall be in the form of a Demand Draft.
2. The bidder should also pay EMD of INR **12,30,000/- (Rupees Twelve Lakhs and thirty thousand only)** with validity of 180 days from the date of bid submission. It shall be either in form of
 - nationalized/scheduled banks, payable at Vadodara
 - OR
 - Bank Guarantee issued by Nationalized Bank including IDBI Bank/Private Banks – Axis Bank, HDFC Bank and ICICI Bank along with banks mentioned in the GR of Finance Department of Government of Gujarat (GR No: EMD/10/2015/508/DMO dated 27.04.2016) only in favour of "CEO, Vadodara Smart City Development Limited".
3. No interest will be payable by the VSCDL on the Earnest Money Deposit.
4. In case bid is submitted without EMD or Bid Fees as mentioned above then VSCDL reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
5. 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.
6. 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.
7. The decision of VSCDL regarding forfeiture of the EMD and rejection of bid shall be final and shall not be called upon question under any circumstances.
8. The EMD may be forfeited:
 - If a bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any; or
 - In the case of a successful bidder, if the bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time.
 - 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.
 - During the bid process, if any information found wrong/manipulated/hidden in the bid.

6.11. Sealing, Marking and Submission of Bids

- Bidders are required to submit their bids in separate sealed envelopes as per instructions given below:
- **Part 1:** Pre-Qualification Bid, Bid Fees, EMD and soft copy in **CD/DVD/Pen drive/USB stick** with complete details as mentioned in Section 10 in "**Envelop 1**" super scribed with Tender No, Due Date and RFP Name – "**Selection of implementing Agency for ICT upgradation of Fire stations and**

ICT enabled fire services in Vadodara city”. The proposal shall also consist with all supporting documents.

- **Part 2:** Technical Bid and soft copy in **CD/DVD/Pen-drive/USB stick** with complete details as mentioned in Section 11 in **“Envelop 2”** super scribed with Tender No, Due Date and RFP Name – **“Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”**. 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

- Notice No.: -----
- Bid for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”.
- Deadline for bid submission: <<DD MMM YYYY>> at <<HH:MM>>

To,

CEO

Vadodara Smart City
Development Limited

-
- 1. The physical copy of Technical Bid, Tender Fee and EMD must be sent strictly through **Postal Speed Post/Registered Post AD/Courier/In-person** so as to reach on or before the deadline given in the RFP. VSCDL won't be responsible for postal delays.
- 2. VSCDL 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 VSCDL 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
 - a. Original Copy of the Tender Fee and EMD
 - b. Pre-qualification Criteria Related Documents
 - c. Technical Proposal Related Documents
 - d. RFP Copy and Addenda & Corrigendum
 - e. 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 Compact Disc (CD)/Pen-drive/USB stick. In the event of any discrepancy between the original and CD/Pen-drive/USB stick, the original shall prevail.
 - f. 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 lead bidder.
- 5. Pre-qualification and Technical Proposal should be signed by an authorized person of the bidder. The Pre-qualification 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 organization to the terms and conditions detailed in this proposal. In case of the consortium, the lead bidder will submit this document.
- 6. Proposals must be direct, concise, and complete. VSCDL 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, VSCDL or Municipal Commissioner, VMC reserves the right to accept or reject any or all the proposals without assigning any reason.

PRICE BID

1. The Price Bid must be submitted online on (n)Procure website (<https://vmc.nprocure.com/>). It should not be sent physically; if submitted physically the bid shall be rejected. Please refer Section 12 for format and instructions.

6.12. Language of Bids

1. The bid prepared by the bidder and all correspondence and documents relating to the bids exchanged by the bidder and VSCDL/VMC, 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, translation of the same in English language is to be duly attested by the bidder.

6.13. 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 VSCDL, failing which it will have to bear extra cost. In case the bidder does not avail concessional rates of levies like customs duty, excise duty, etc. VSCDL will not take responsibility towards this. However, VSCDL may provide necessary assistance, wherever possible, in this regard.

6.14. 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, VSCDL 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 7.10 in all respects.

6.15. Taxes

- The prices mentioned in the Price Bid should include all applicable taxes. Any variation in statutory duties/taxes post execution of Contract shall be borne by VSCDL. The successful bidder shall pass on any benefit either on own account or due to reduction in purchase cost because of input tax credit availment by supplier as per GST transitional provision to VSCDL, as per the requirement of sec. 171 (Anti-profiteering) of CGST Act, 2017. VSCDL shall be entitled to deduct any taxes/cesses as may be applicable.

6.16. 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.

6.17. Right to Vary the Scope of the Work at the Time of Award

- VSCDL 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 VSCDL changed order.

•

6.18. Modification or Withdrawal of Bids

1. A bidder wishing to withdraw its bid shall notify VSCDL by e-mail prior to the deadline prescribed for bid submission. A withdrawal notice may also be sent by electronic means such as e-mail, but it must be followed by a signed confirmation copy, postmarked at least one day prior the deadline for submission of bids.
2. The notice of withdrawal shall:
 - Be addressed to VSCDL at the address named in the Bid Datasheet,
 - Bear the Contract name, the <Title> and <Bid No.>, and the words “Bid Withdrawal Notice.”
3. Bid withdrawal notices received after the bid submission deadline shall be ignored, and the submitted bid shall be deemed to be a validly submitted bid.
4. 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.

6.19. Evaluation Process

1. The bidder must possess the technical know-how and the financial wherewithal that would be required to successfully provide the services sought by VSCDL, 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. VSCDL may appoint a Bid Evaluation Committee (BEC) to scrutinize and evaluate the Pre-qualification 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. VSCDL may waive any informality or nonconformity in a bid which does not constitute a material deviation according to VSCDL.
3. The technical bid of only those bidders (or consortia) shall be opened which meet all the criteria of the Pre-qualification Criteria mentioned in Section 6 as per format provided in Section 10 below.
4. There should be no mention of bid prices in any part of the bid other than the Commercial Bids.

6.20. Opening of Technical Bid

1. VSCDL shall open the Technical Proposals, of bidders qualifying the Pre-qualification Criteria, in public, in the presence of bidders' designated representatives and anyone who chooses to attend, at the address, and at the date and time specified in Section 4.
2. Only bids that are opened and read out at the proposal opening and are accompanied with hard copy of Demand Drafts for EMD shall be considered further.

6.21. Evaluation of Technical Bids

1. The Technical Bids of only those bidders, who qualify in the Pre-qualification stage, shall be considered and will be evaluated as per the evaluation criteria in this clause. The Bid Evaluation Committee (BEC) shall request each bidder to conduct a Proof-of-Concept (PoC) as well as invite them to make a presentation as part of the technical evaluation.
2. The evaluation committee may require written clarifications from the bidders to clarify ambiguities and uncertainties arising out of the evaluation of the bid documents (to be stated precisely as it should be in VSCDL's interest).
3. The Proof-of-Concept (PoC) will consist of demonstration/pilot the product/solution offered as part of their technical offer and will consist of the following:
 - Wireless Addressable Central Monitoring Station
 - Wireless Addressable Local Monitoring Station
 - GPS units for Fire tenders
 - Mobile NVR for fire tenders
 - 3G/4G Router in fire tender

- Water level sensors with routers for tankers
 - Mobile Data Terminal
 - POS machine for Water Tankers
 - Demo for CAD Software
 -
4. VSCDL will make available one set each (comprising of Fire tanker, water tankers and ambulances), for PoC purpose. PoC shall be evaluated by VSCDL and marks awarded Under D2 section of the technical evaluation.
 5. Only those bids which have a minimum score of 70% of total marks in Technical evaluation will be considered for opening of their Commercial Bid. However, The Chairman, VSCDL or Municipal Commissioner, VMC reserves the right to lower the minimum required marks if none of the Bidders achieves 70% of the total marks. Only the bids qualifying the Technical evaluation will be considered for Commercial evaluation.
 -
 -
 -

6.22. Technical Evaluation Criteria

- The bidder's technical solution proposed in the Technical Evaluation bid shall be evaluated as per the evaluation criteria in the following table:
-

Section	Evaluation Criteria	Weightage
A	Bidder Competence and Relevant Experience	25%
B	Technical and Functional Compliance of Solution	20%
C	Approach & Methodology	15%
D	Project Presentation and Demonstration/Proof of Concept	35%
E	Proposed Resources for the Project	5%

#	Technical Evaluation Criteria	Technical Evaluation Parameter	Weightage										
A. Bidder Competence and Relevant Experience													
A1	People in Organization	<ul style="list-style-type: none">The bidder (all the consortium members together, in case of consortium) having at least 40 FTE (Full Time Employees) on the payroll of organization working on ICT projects will get 70% marks of total allocated marks.For every additional 20 FTEs, the bidder will get additional 10% marks subject to maximum of 5 marks. <table><tr><th>Number of FTE</th><th>Marks</th></tr><tr><td>More than 40 FTE</td><td>5</td></tr><tr><td>31 to 40 FTE</td><td>4.5</td></tr><tr><td>21 to 30 FTE</td><td>4</td></tr><tr><td>Minimum 20 FTE</td><td>3.5</td></tr></table>	Number of FTE	Marks	More than 40 FTE	5	31 to 40 FTE	4.5	21 to 30 FTE	4	Minimum 20 FTE	3.5	5%
Number of FTE	Marks												
More than 40 FTE	5												
31 to 40 FTE	4.5												
21 to 30 FTE	4												
Minimum 20 FTE	3.5												
A2	Bidder Experience – in Relevant projects	<p>The bidder (any consortium member/OEM Partner) having experience of one completed project.</p> <p>In case of OEM credentials, OEM should have at least 2 resources to be offered, with their CVs attached. These resources should have experience in implementation of at least one relevant project in last five years in India for any Fire Department of any State or Municipal Corporation.</p> <p>It should include one out of below mentioned installation:</p> <p>1. Integrated Command Control System Computer (ICCC)</p> <p>2. Computer Aided Dispatch</p> <p>3. Automatic Vehicle Tracking</p> <table><tr><th>Number of Projects</th><th>Marks</th></tr><tr><td>= 4 or > 4</td><td>10</td></tr><tr><td>= 3</td><td>9</td></tr><tr><td>= 2</td><td>8</td></tr><tr><td>= 1</td><td>7</td></tr></table>	Number of Projects	Marks	= 4 or > 4	10	= 3	9	= 2	8	= 1	7	10
Number of Projects	Marks												
= 4 or > 4	10												
= 3	9												
= 2	8												
= 1	7												
A3	Bidder Experience – deployment of Computer aided dispatch software	<ul style="list-style-type: none">The bidder/any consortium member should have experience of one completed project that entails deployment of Computer aided dispatch software in at least 50 vehicles. In case of OEM credentials, OEM should have at least 2 resources to be offered, with their CVs attached. These resources should have experience in implementation of atleast one relevant project. <table><tr><th>Number of Projects</th><th>Marks</th></tr><tr><td>= 4 or > 4</td><td>10</td></tr><tr><td>= 3</td><td>9</td></tr><tr><td>= 2</td><td>8</td></tr><tr><td>= 1</td><td>7</td></tr></table>	Number of Projects	Marks	= 4 or > 4	10	= 3	9	= 2	8	= 1	7	10
Number of Projects	Marks												
= 4 or > 4	10												
= 3	9												
= 2	8												
= 1	7												

		Note: Documentary proof to be provided about such integrated software.																																																							
B. Technical and Functional Compliance of Solution																																																									
B1	Technical Compliance of Solution – Adherence to Technical Requirement	<div><div>• Full compliance to technical specifications provided in this Tender for mentioned elements.</div><table><tr><th>Functional Requirement Parameters</th><th>Compliance</th><th>Marks</th></tr><tr><td>Computer Aided Dispatch (CAD)</td><td></td><td>2</td></tr><tr><td>Firewall for Smart DC</td><td></td><td>1</td></tr><tr><td>L3 Switch for Smart DC</td><td></td><td>2</td></tr><tr><td>Wireless Addressable Central and Local Monitoring Station</td><td></td><td>2</td></tr><tr><td>L2 Switch for Fire Station</td><td></td><td>1</td></tr><tr><td>Rack Server</td><td></td><td>1</td></tr><tr><td>TOR Switch</td><td></td><td>1</td></tr><tr><td>SAN Storage</td><td></td><td>1</td></tr><tr><td>Smart Rack</td><td></td><td>1</td></tr><tr><td>Water Level Sensors for Fire Tenders</td><td></td><td>1</td></tr><tr><td>POS machine for Water tankers</td><td></td><td>1</td></tr><tr><td>Water Level Equipment for Monitoring water level of River</td><td></td><td>1</td></tr><tr><td>GPS Unit for Vehicles</td><td></td><td>1</td></tr><tr><td>Mobile Data Terminal for Fire Tenders</td><td></td><td>1</td></tr><tr><td>Mobile NVR for Fire Tenders</td><td></td><td>1</td></tr><tr><td>Fix Mini dome Camera for Fire Tender</td><td></td><td>1</td></tr><tr><td>3G/4G Router in Fire Tender</td><td></td><td>1</td></tr></table></div>	Functional Requirement Parameters	Compliance	Marks	Computer Aided Dispatch (CAD)		2	Firewall for Smart DC		1	L3 Switch for Smart DC		2	Wireless Addressable Central and Local Monitoring Station		2	L2 Switch for Fire Station		1	Rack Server		1	TOR Switch		1	SAN Storage		1	Smart Rack		1	Water Level Sensors for Fire Tenders		1	POS machine for Water tankers		1	Water Level Equipment for Monitoring water level of River		1	GPS Unit for Vehicles		1	Mobile Data Terminal for Fire Tenders		1	Mobile NVR for Fire Tenders		1	Fix Mini dome Camera for Fire Tender		1	3G/4G Router in Fire Tender		1	20%
Functional Requirement Parameters	Compliance	Marks																																																							
Computer Aided Dispatch (CAD)		2																																																							
Firewall for Smart DC		1																																																							
L3 Switch for Smart DC		2																																																							
Wireless Addressable Central and Local Monitoring Station		2																																																							
L2 Switch for Fire Station		1																																																							
Rack Server		1																																																							
TOR Switch		1																																																							
SAN Storage		1																																																							
Smart Rack		1																																																							
Water Level Sensors for Fire Tenders		1																																																							
POS machine for Water tankers		1																																																							
Water Level Equipment for Monitoring water level of River		1																																																							
GPS Unit for Vehicles		1																																																							
Mobile Data Terminal for Fire Tenders		1																																																							
Mobile NVR for Fire Tenders		1																																																							
Fix Mini dome Camera for Fire Tender		1																																																							
3G/4G Router in Fire Tender		1																																																							
C. Approach & Methodology and Technical Compliance																																																									
C1	Approach & Methodology and Technical Compliance	<div><div>• Following parameters will be evaluated:</div><table><tr><th>Parameter</th><th>Marks</th></tr><tr><td>Completeness of project plan and ease of implementation (including training and change management plan)</td><td>3</td></tr><tr><td>Clarity of BoM, Details about unique make and model and technical compliance of hardware and software</td><td>12</td></tr></table></div>	Parameter	Marks	Completeness of project plan and ease of implementation (including training and change management plan)	3	Clarity of BoM, Details about unique make and model and technical compliance of hardware and software	12	15%																																																
Parameter	Marks																																																								
Completeness of project plan and ease of implementation (including training and change management plan)	3																																																								
Clarity of BoM, Details about unique make and model and technical compliance of hardware and software	12																																																								
E Project Presentation and Demonstration/Proof of Concept																																																									
E1	Project Presentation	<div><div>• Following parameters will be evaluated during presentation:</div><table><tr><th>Parameter</th><th>Marks</th></tr></table></div>	Parameter	Marks	5%																																																				
Parameter	Marks																																																								

		SI's understanding of requirements (functional and technical) and completeness of proposed solution in presentation.	2							
		Presentation of Approach & Methodology for implementation	1							
		Clarifications given during Presentation	2							
E2	Demonstration Proof of Concept	Proof of Concept (PoC) & Demonstration of Offered Solution and all equipments mentioned in Schedule B & C of Commercial Bid Format		30%						
F. Proposed Resources for the Project										
F1	People on Project	<ul style="list-style-type: none">Following profiles suggested by the bidder will be evaluated. Minimum qualifications of these resources shall be as per RFP <table><tr><th>Profile</th><th>Marks</th></tr><tr><td>Project Manager</td><td>3</td></tr><tr><td>Field Support Engineer</td><td>2</td></tr></table>		Profile	Marks	Project Manager	3	Field Support Engineer	2	5%
Profile	Marks									
Project Manager	3									
Field Support Engineer	2									

- Note:
 - VSCDL (or the nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical evaluation criteria.
 - Technical bids of only those bidders, who qualify in the Pre-qualification stage, shall be considered for Technical evaluation. The Bid Evaluation Committee (BEC) may invite each bidder to make a presentation may require written clarifications from the bidders to clarify ambiguities and uncertainties arising out of the evaluation of the Bid documents.
 - Bidders, who qualify the pre-qualification stage, shall be asked to provide Proof of Concept (PoC)/ demonstration of their offered solution and products. After setting up the PoC demonstration, the bidders shall inform VSCDL/VMC who shall conduct demonstration/testing of components to test their conformity to Technical specifications, quality and functionalities. The system shall be checked for full functionality in an integrated environment through test run and tests specified in RFP Volume 2. Based on this demonstration/testing, VSCDL/VMC shall award marks which shall be considered under D2 section of the Technical evaluation.
 - For any project, the citations (submitted by the bidder) must be awarded under a single work order.
 - Only projects for which the Work Order has been issued before 6 months of the release date of this RFP (supported by copy of Work Order), will be considered for evaluation.
 - The bidders have to submit LoI/work order with full BoQ, contract agreement and copy of invoice submitted to the client as a supporting documents for each project. For projects where the invoice copy is not available, the LoI/work order date should be six months before the release date of this RFP. Technical bid document without supporting document will liable for rejection.
 - Citations of foreign/Indian parent of an Indian company shall be considered in case the said foreign/Indian company holds stake of 75% or more in the said Indian company. Citations of Indian subsidiary of an Indian company (parent) shall be considered in case the said Indian parent company holds stake of 75% or more in the said Indian subsidiary
 - In case of conditional bid or major deviations from the RFP requirements, VSCDL may at its discretion reject the respective bid and will not be considered for further evaluation process.
 - Projects where the bidder is a subcontractor or where there is one level of sub-contracting by the bidder to other party, will not be considered for evaluation purposes.
 - In case of consortium: For each consortium member, only those project citations which are attributable to relevant scope of the said consortium member as per roles and responsibilities matrix

defined in consortium agreement, shall be considered for Technical Evaluation Criteria specified in Section 7.22.

- Bidders who receive a minimum Technical score of 70% will qualify for Commercial evaluation stage.

6.23. Opening of Commercial Bid

1. The Commercial bids shall not be opened by VSCDL until the evaluation of the Technical proposals has been completed.
2. VSCDL will open the Commercial bids of those bidders who have achieved **minimum score of 70% of total marks in Technical evaluation.**
3. VSCDL 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 VSCDL.
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.

6.24. Evaluation of Commercial Bids and Selection Method

1. VSCDL will award the Contract to the bidder based on **Lowest Quoted Price (L1)**. No additional cost in any form will be entertained by VSCDL during the contract period.
2. The Commercial evaluation will be done based on the parameters given below: Total Estimated Commercial Bid of a bidder would be calculated based on quantities given in Section 12. The quantities in this table has been derived/estimated, considering O&M period of 5 years. 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 VSCDL.
3. The Commercial Bids of only the technically qualified bidders will be opened for evaluation.
4. Since the payments to the SI will be made over several years, the Discounted Cash Flow (DCF) method will be used to compare different payment terms, including advance payments and progressive stage payments to the SIs so as to bring them to a common denomination for determining lowest bidder. The DCF is defined in the Glossary of Management and Accounting Terms, published by the Institute of Cost and Works Accountants of India. DCF method would be used for evaluation of bids. Detailed modalities for applying DCF technique are as below:
 - a. Net Present Value (NPV) method will be used for evaluation of the Commercial Offer. The Net Present Value of a contract is equal to the sum of the present values of all the cash flows associated with it. The formula for calculating NPV of a Commercial Offer is illustrated below.
 - i. The VSCDL will evaluate the offers received by adopting Discounted Cash Flow (NPV) method with a discounting rate of 9%.
 - ii. NPV will be calculated on the annual cash outflows.
 - iii. Standard software for example 'Excel', 'or any other spreadsheet will be used for NPV analysis.
 - iv. The NPV will be calculate during the formula below:
 - $NPV (Cb) = Co + C1/(1+r)^1 + C2/(1+r)^2 + C3/(1+r)^3 + C4/(1+r)^4 + C5/(1+r)^5 + \dots + Cn/(1+r)^n$
 - Where,
 - a) Co is the sub-total for services provided during implementation phase
 - b) C1 is defined as: Cost of O&M Services for the 1st year after "Go-Live"
 - c) C2 is defined as: Cost of O&M services for the 2nd year after "Go-Live"
 - d) Cn is defined as: Cost of O&M services for the nth year after "Go-Live"
 - e) r is the annual discounting rate as specified in Para (2) above
 - v. The method of selection is based on Lowest Quoted Price i.e. L1 Bidder arrived using above formula
5. 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 the higher technical score will be invited for negotiations and awarding the contract. In case of a tie on the technical scores and L1 price, the Cb will be calculated to the third place of decimal and the bidder with lesser Cb will be invited for negotiations and awarding of the contract.
6. **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

6.25.OEM / Implementation Partner Participation Criteria

1. The bidder is required to submit Manufacturer's Authorization Form (MAF) from OEMs, of items listed in Annexure, stating that the bidder in concern would be bidding for their products/ solutions.
2. Bidders are required to specify only one make and model of each item and provide the details in the Technical bid.
3. 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.
4. 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 Operating Officer/ Municipal Commissioner, for further penal action including blacklisting.
5. 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.
6. 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.

-

6.26. Rights to Accept/Reject Any or All Proposals

- VSCDL 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 VSCDL's action.
-

6.27. 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. VSCDL 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 Acceptance, whichever is earlier. All reference timelines as regards the execution of the project and the payments to the Implementation Agency 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 VSCDL, it will promptly notify each unsuccessful bidder and return their EMDs.
4. At the time VSCDL notifies the successful bidder that its bid has been accepted, VSCDL 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 and return it to VSCDL. Draft format of the contract is given in the Annexure B, Section 13.2.

6.28. Quantity Variation

1. At the time of award of contract, the quantity of goods, works or services originally specified in the bidding documents may be increased or decreased. The successful bidder shall not object to the upward or downward variation in quantities of any item within the variation limit of -50% to +50%.
2. Payment for additional quantities within the variation limit shall be made at tender rates and the tender rates shall be valid for entire duration of the contract.
3. No claim shall be entertained or become payable for price variation of additional quantities.
4. Repeat orders for extra items or additional quantities (**upto 50% additional quantity**) may be placed within 2 years of the original request order. The Unit Rate mentioned in the Commercial bid formats shall be used for the purpose of "Repeat Orders" for respective items. However, based on the market trends, VSCDL retains the right to negotiate the Tender rate and/or request better specifications based on market and technological scenario. Delivery or completion period may be proportionally increased.

6.29. Performance Bank Guarantee

1. The successful bidder shall at his own expense, deposit with department, within 60 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 favour of VSCDL (VSCDL) for the due performance and fulfilment of the contract by the bidder.
2. There will be two Performance Bank Guarantee. One PBG for the implementation phase valid for 2 years, and one PBG for operations phase for 5 years from Go-Live. The implementation phase PBG will be 10% of CAPEX and operations phase PBG will be 10% of OPEX for 5 years. 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 three months after the expiry of the Contract Period ("Validity Period").
4. The Performance Bank Guarantee letter format can be found in the Annexure B, Section 13.1 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 and 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.

6.30. Vandalism/Force Majeure

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

6.31. 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.

6.32. Terms and Conditions of the Tender

1. Bidder is required to refer to the draft Contract Agreement, attached as Annexure B, Section 13.2 in this Bid document, for all the terms and conditions (including project timelines) to be adhered by the successful bidder during project implementation and post-implementation period.
2. Please note that one needs to read the Contract Agreement as a whole document; and the Annexure mentioned there-in may not correspond to the Bid document Annexure. Please refer to the Interpretation Section of the Draft/Master Service Agreement.

7. Scope of Work

VSCDL wishes to utilize the services of an Implementation Agency (hereafter referred to as “Implementation Agency”/“IA”/“Selected Agency”/“Vendor”/“Bidder”) for ICT enabled Upgradation of Fire Stations and ICT enabled Fire Services. The project is envisaged to be implemented in a time period of 6 months which is considered as implementation period and the Operations & Maintenance Period (O&M) is considered for a period of 5 years from Go-Live.

The scope of work envisaged for the Implementation Agency is categorized as under:

Pre –Implementation Scope till Go-Live

1. Supply, Installation of Central and Local Monitoring Equipment, Communication and Navigation Devices, Sensors and other equipments.
 2. Supply, Installation, Configuration/Customization of software together with necessary databases and other software.
 3. Integration of software with external applications like Integration with IBM IOC, GIS, EMS, ERP, Helpdesk, Call Management and AVLS of ITMS. Call Centre Solution is available. Make - Coral Telecom Model –IRIS- IVDX
 4. Submission of Inception report, System Requirement Specifications, System Design documents and Site Survey Report in which the Implementation agency has to arrive at the end point infrastructure requirements.
 5. Smart Data Center Setup at ICCC.
 6. Procurement of Hardware, Licenses and hosting the solution.
 7. User Acceptance Testing and pre-launch security audit, fire standards audit of the.
 8. User Trainings and Roll - Out of the solution
 9. Incidental public works required in order to deploy the system components
 10. Compliance with National and International standards for Software used
 11. Preparation of Standard Operating Procedures (SOPs) with help of the relevant departments like Fire Services, Health and Water
 12. Provide connectivity of Field Devices
-
1. Post Implementation Scope for the Operation and Maintenance Period
 1. 24x7 Manpower Support for application maintenance including preventive, corrective maintenance and monitoring of the application.
 2. System handholding at locations.
 3. Recurring refresher trainings and Change Management activities.
 4. Regular security, third party fire audit and inspection for the solution as per applicable standards for the state and country.
 5. Fool-proof monitoring mechanism for vehicles associated in this project.
 6. All infrastructure (e.g. sensors, panels, etc.) upgrade, maintenance and cost-free replacement (in case of failure) during the contract period.

7.1 Geographical Scope

It includes central monitoring of all field devices at CCC and local fire stations and it also includes installation of sensors, cameras, GPS devices and other field equipment's as mentioned in BOQ

Following are the components that the System Integrator would have to Supply, install, commission and integrate as the part of scope of this tender.

- Wireless Addressable Central Monitoring Station
- To provide a overview of the entire city limits under Vadodara, incident tracking, time stamp based event logging and recording of various events. It will be installed in CCC.
- Wireless Addressable Local Monitoring Station
- Application should have features like
 - GIS integration with Base maps from VSCDL that can have custom Boundaries to be defined as per the area being monitored by local fire station
 - It should capture Source and type of incident that helps the fire department pinpoint actual location of event
 - It would be installed at all local fire stations
- L2 Switch for Fire Stations to be installed at 6 Fire Stations
- Water Level Equipment for Monitoring Water Level of River to be installed and integrated with CCC for indicating change in Water Level of River
- Water Level Sensors for Fire Tenders which can track water levels of fire tenders with an alarming mechanism for tracking.
- POS machine for Water Tankers to track transactions for water consumption of these water tankers.
- Mobile Data Terminal for Fire Tenders for Data Communication with Fire Tenders
- GPS units for Fire tender, water tankers and ambulances to be integrated with central monitoring station at CCC
- Mobile NVR for fire tenders to be installed in fire tenders and to be integrated with central monitoring station at CCC
- 3G/4G Router in fire tender to be installed in fire tenders for providing connectivity to wireless field equipment's installed in fire tender
- L3 switch for smart DC to be installed at CCC for smart DC
- OFC connectivity for fire stations will be provided by existing OFC network of VSCDL by VSCDL.
- Fix dome camera for fire tender
- To install Fixed dome camera and in Fire Tender to get the live feed of the incident to the monitoring station
- Any Other components Quoted by bidder
- If bidder is quoting any other equipment additional to the BoQ provided for this Bid
- Smart Data Centre
- DC Infrastructure at City Command and Control Centre to have following components
 - Rack Server
 - TOR Switch
 - Firewall
 - SAN Storage
 - Structured Cabling
 - Smart Rack

7.2 Supply, Installation, Configuration/Customization of Software

The Implementation Agency will be responsible for the supply, installation, configuration, customization of application (COTS/Bespoke development) together with necessary databases and other software. The scope of work will include the following:

1. IA shall be responsible for understanding the functional requirements of the solution as mentioned in the RFP. The IA will be responsible for requirement gathering, detailed analysis, mapping the requirements with suitable software and identification of configuration and customization area. The bidder shall propose suitable solution to meet the functional and technical specifications laid down in the bid document.
2. Supply the genuine, full use and perpetual licenses, if COTS solution is proposed for any/all of the subsystem or application. This would exclude any enterprise level license already available with VSCDL for use. The bidder is required to pro-actively seek information on licenses available with VSCDL and confirm whether they can be used for the purpose of this project.
3. Install, configure and/or customize the proposed Solution as per the functional and technical requirements provided by VSCDL in the bid document.
4. Developing the specific modules and functionalities which are not available in the proposed COTS solution but are required in the application as per the requirements provided by VSCDL in the bid document.
5. Supplying the application, database and related software, integration tools and documenting the process to be followed for installing the same.

7.3 Integration of Software with other applications

The solution is envisaged to be a completely automated and integrated software application to be used by internal users of VSCDL. Automation will only be achieved if the system is capable enough to exchange data / information to and from other external systems or departmental applications. The Implementation Agency shall ensure that a standard mechanism of data exchange be built and implemented to cater to any external systems requirement so that the impact on the solution is minimal due to any external changes. The system shall enable integration / data exchange to and from any external application / database which will happen only through an 'Interface Component' by using a standard data exchange protocol through a secure channel, utilizing the 'Interface component'. The primary responsibility of the integration will lie with the IA. The IA will be responsible to liaise with the external agencies for successful integration. VSCDL will facilitate the process of to facilitate issue resolution. The integration will be required with the following VSCDL applications –

Integration with IBM IOC, Helpdesk, Call Management and AVLS of ITMS

1. IBM IOC: Integration will be required with IBM IOC an integrated software solution for ICC
2. ERP: Integration will be required with Project management module of ERP in order to keep track of the wireless sensors and their present status.
3. AVLS of ITMS: The solution will be created with extendible interface and service oriented architecture in order to integrate with VSCDL's AVLS System.
4. GIS – Software has to be integrated with GIS software in order to
5. Helpdesk: The solution will be created with extendible interface and service oriented architecture in order to integrate with VSCDL's Helpdesk.
6. Call Management System: The solution will be created with extendible interface and service oriented architecture in order to integrate with VSCDL's Call Management System.

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

Considerations for devices installation:

- a. The inside vehicle GPS device should be tamper proof. Also it shall be installed in the dashboard of the vehicle. The GPS device shall also generate notifications in case of any tampering activity.
- b. The others sensors shall also be able to generate tampering notifications.
- c. The GPS device should not use the inside vehicle battery to an extent that it drains out the vehicle battery. It should have a facility to go in a standby mode. The bidder should arrange added battery in case of the GPS device and sensors are using more battery from the vehicle. The bidder should also arrange for charging and maintenance of the added battery.
- d. The implementing agency will responsible for installing and maintaining & operating all the required in vehicle units for execution of AVLS which includes GPS device, Data connection card (GSM,CDMA,4G,3G,2G Card), sensors. The payments and responsibility of smooth operations of the above mentioned in vehicle units will of the implementing agency.

GPS Devices to be installed in Following Vehicles -

Sr. No.	No. of GPS Devices	Qty.
1	Fire Tenders	30
2	Water Tanker	20
3	Ambulance	10

7.4 Deliverables

In order to achieve the high level of stability and robustness of the application, the system development life cycle must be carried out using industry standards best practices and adopting the security constraints for access and control rights. The Implementation Agency is expected to follow the standard SDLC cycle, including proper assessment, documentation, version control and other criteria's to ensure long term continuity of this project. The major deliverables to be submitted by the IA are as follows:

1. Inception Report which includes Project Schedule, Manpower Deployment List, Resource Deployment List, Communication Plan, Progress Monitoring Plan, Standard Operating Procedures, Risk Mitigation Plan, Escalation Matrix
2. Site Survey Report which includes detailed bill of material indicating: number, type and make of sensors and output devices to be deployed at each location
3. Software Development Lifecycle Documents which include Traceability Matrix, Functional Requirements Specification, System Requirements Specification, High Level design, Detailed design, Database design, Application Architecture, User Acceptance Test plan, System Test plan, User manual and Training manual
4. The Implementation Agency shall ensure the deployment of management and monitoring tools like Project Management, Application Performance Monitoring, Enterprise Management System, version control (software as well as document) and bugs tracking tool. At least two user licenses of the same must be provided to VSCDL during the tenure of contract.

7.5 Hosting at Smart Data Centre in CCC

1. The DC Site for this project system shall be hosted in CCC.
2. The components at the DC Site will include -
 - i. Rack Server
 - ii. TOR Switch
 - iii. Firewall
 - iv. SAN Storage
 - v. Structured Cabling
 - vi. Smart Rack

Apart from the Production Environment, the Implementation Agency shall maintain the testing, training and staging environments as well. Some of the key considerations that the Implementation Agency shall aim for while designing the infrastructure for hosting the application at Data Centre to ensure that the project meets SLA requirements, standards, specifications and performance prescribed:

1. Performance: The system should provide fast and steady response times (Quality of Service). The speed and efficiency of the system should not be affected with growing volumes, especially during reporting, MIS, online processes and batch processes
2. Availability: All the components of application must provide adequate redundancy to ensure high availability. The systems shall be designed for 24x7 operations and meet all SLA requirements
3. Security: The implementation of application components should comply with the standard guidelines of Information Security Management System (ISMS). The implementation shall ensure the end-to-end security for application, services, data and the infrastructure from malicious attacks and data theft

4. **Manageability:** The proposed System must have versioning features to track, document and process revisions made in the system
5. **Scalability:** All components of the application must support scalability to provide continuous growth to meet the requirements and demands of VSCDL. A scalable system is one that can handle increasing number of requests without adversely affecting the response time and throughput of the system. Solution should support vertical scalability (the growth within one operating environment) and horizontal scalability (leveraging multiple systems to work together in parallel) by the use of load balancers and high available servers.
6. **Inter-operability and Integration:** The entire system with all subsystems should be interoperable and must seamlessly integrate with other applications and the applications already operational in VSCDL and being developed / already developed by Government of India and operational in VSCDL/ as well as Government of Gujarat for similar purposes.
7. **Standards and protocols:** The computing architecture must be Server based. The applications will reside in the servers and will be accessed to the users through other browser based computing facility / technology.

The Implementation Agency shall obtain 'Safe-to-Host' certificate from CERT-in empanelled organization before deployment of the application at the data centre and thereafter at regular interval of every six months and share the reports with VSCDL. The Implementation Agency shall be responsible for complying with the suggestions mentioned in the security audit report and shall submit the action report to VSCDL within 15 days of receiving the report. The IA needs to update the system in response to any adverse findings in the report, without any additional cost to VSCDL. VSCDL may also depute auditors to conduct security check/ vulnerability test/penetration test.

The implementation agency will need to provide back-up as per the back-up policy decided by VSCDL and infrastructure to take regular back up. The implementation agency shall have to perform restoration of the backups at regular intervals (as agreed upon by VSCDL) to ensure recovery restores the system to its recorded state. Detailed reports of the restoration process and results should be shared with VSCDL once complete.

The implementation agency must apply necessary upgrades to application in case any changes/ upgrades/ migration is performed for Operating Systems, System Software such as Database, Application software, etc. at no additional cost. The bidder is free to propose the appropriate staffing size (resources required) for application maintenance support and infrastructure system support based on the service level agreements.

Service Provisioning

- The user admin portal should be accessible via secure method using SSL certificate.
- IA should be able to create, delete, shutdown, reboot virtual machines from provisioning portal.
- IA should be able to provision additional resources from provisioning portal as and when require.
- IA should be able to predict his billing of resources before provisioning any resources.
- IA should be able to set threshold of resources for all types of scalability.
- IA should be able to provision any kind of resources either static or elastic resources.
- IA should be able to set the scaling parameters like in case of horizontal scaling,
- IA should be able to set percentage / quantity of RAM consumption.

- IA should be able to set percentage / quantity of CPU consumption.
- IA should be able to set percentage / quantity of network bandwidth.
- IA should be able to set port on which horizontal scaling will work.
- **Industry Standards:** IA has to seek a datacentre compliant with industry standards as defined by (but not limited to) the following organizations: ISO, TIA/EIA, Uptime.

Datacentre Facility Requirement

- **Security:** IA should be able to seek a datacentre facility that is highly secured with multiple point of authentication at physical and logical level security.
- **Monitoring:** IA should be able to seek a datacentre which should be under 24 x 7 x 365 days monitoring i.e. network and video surveillance system.
- **Support:** IA to seek a datacentre which should have 24 x 7 x 365 L1, L2 and L3 support through mail, phone and chat.
- **Availability:** It should offer redundancy in critical infrastructure, including (but not limited to) mechanical, electrical, telecommunication.
- **Energy Efficient:** IA to seek a highly efficient datacentre facility that leverages innovative technology and favourable environmental to reduce energy consumption in the datacentre.
- **Industry Standards:** IA to seek a datacentre compliant with industry standards as defined by (but not limited to) the following organizations: ISO, TIA/EIA, Uptime.

7.6 Testing & Quality Adherence

The Implementation Agency shall ensure that the application is thoroughly tested as per standard process defined hereunder or by VSCDL should the process evolve over the contract period. VSCDL requires thorough and well-managed test methodology to be conducted. The Implementation Agency must build up an overall plan for testing and acceptance of system, in which specific methods and steps should be clearly indicated and approved by VSCDL. The Implementation Agency is required to incorporate all suggestions / feedback provided after the elaborate testing of the application, within a pre-defined, mutually agreed timeline.

The Implementation agency needs to keep track of the suggestions that deviate from the original requirements before classifying them as change request / enhancement. This classification shall be done in separate meetings where all stakeholders will agree on the level of change and the revised timeline to implement it. All fixes done to comply with the already specified requirements are required to be done as per the specified timelines only at no extra cost to VSCDL.

The Implementation Agency shall undertake the following activities:

1. Outline the methodology that will be used for testing the system
2. Define the various levels or types of testing that will be performed for system
3. Provide necessary checklist/documentation that will be required for testing the system
4. Describe any techniques, test cases/ scenarios / scripts that will be used for testing the system
5. Describe how the testing methodology will conform to requirements of each of the functionalities
6. Indicate/demonstrate to VSCDL that all applications installed in the system have been tested
7. The vendor shall provide a workflow for sign-off on test deliverables that is mutually agreed upon by both the parties

Competent Authority from VSCDL shall issue appropriate acceptance certificate to the Implementation Agency for successful roll-out of the application. The testing levels should include Unit Testing, Integration Testing, System Testing and Acceptance Testing. These tests should be included such as security testing, performance testing, Usability testing, Concurrency testing, etc. The Implementation Agency must work with VSCDL to provide a detailed deployment plan, including but not limited to, application version control, and load all application materials, assignment of user rights and security, and verification of correct functionality. The Implementation Agency must present a deployment plan to VSCDL for their approval by the beginning of the test period. It is necessary that the application is deployed as per the Implementation Schedule along with the necessary itemization of all hardware and/or software, integrating all external application as well as any and all ancillary requirements. For testing purposes, if any equipment / external device interfacing with the application is required to be setup / configured / commissioned / installed it would be the responsibility of the vendor. The Implementation Agency shall ensure that the Application Solution is web enabled. The solution must use standard relational database.

Language Support: Application Portal with the function specification and registration landing page (or labels only) must be provided with bilingual i.e. in English and Gujarati language.

Access and Interface: The application must be user-friendly, intuitive and equipped with help / support facilities.

The below mentioned components need to be taken care of while deploying the technology components on Solution:

1. Platform Flexibility

- a. Multi-tier architecture shall be used
- b. Open Standards and Interoperability shall be considered
- c. XML / XBRL based standard shall be used wherever applicable
- d. Compliance to SOA and Web-services

2. Interoperability

- a. Usage of standard APIs
- b. Service-oriented architecture (SOA) based
- c. Support for multiple industry standard databases with ODBC, JDBC and Unicode compliance

Area	Standard
Information access/ transfer protocols	SOAP, HTTP/HTTPS/REST/JSON
Interoperability	Web Services, Open standards
Information Security	System to be ISO27001 compliant
IT Infrastructure management	ITIL / EITM specifications

Service Management	ISO 20000 specifications
Internet Protocol	IPv6 and IPv4 ready equipment

7.7 Training

Implementation Agency shall provide training to the application users to efficiently use the system. Training manual shall be submitted by the Implementation Agency. The Implementation Agency shall provide training to the stakeholders and may be grouped module wise for hands-on training in batches per day for a specified duration / working days. It is proposed that training be covered over a period of one day each batch having strength of 20 participants. The training is expected to be hands-on and conducted at the training centres proposed to be set-up at VSCDL locations. It shall be the responsibility of VSCDL to set-up training centers with associated hardware and networking infrastructure. The Implementation Agency shall submit a softcopy (CD) and hardcopy of the training material (in English and Gujarati) to the Change Management Team before commencing the training session.

In case of modifications either in the Training Plans or substitutions of the regular trainers, proper correspondence with the Change Management Team shall be made. Training program shall be continuously monitored by the representatives of VSCDL so as to ensure desired quality standards. Implementation Agency shall also prepare a feedback mechanism (i.e., printed feedback forms) and get it filled by the participating batch and submit the same on a regular basis to VSCDL.

The Implementation Agency shall provide audio-video content based multimedia software as training material. The Implementation Agency shall install and train the application users using the same. It is the responsibility of the Implementation Agency to prepare documents including User manuals, technical manuals, installation manual, administration manuals, training manuals and provide the same to the Change Management team. The Change Management team shall provide the necessary inputs for preparing the training material.

Tests for assessing the trainees after training shall be designed by the IA and approved by the VSCDL. Rating of the trainers shall be finalized by the VSCDL or its nominee. On the basis of the training assessment and feedback provided by the participants, the decision on final rating of the trainers shall be taken at the sole discretion of VSCDL. Participants who do not pass have to be retrained once by the IA at no additional cost.

Audio Visual Training system and Online Help.

1. In order to assist the users in operating / navigating through the application and processes, it is proposed that modules / section wise training material, in the form of Audio-Visual may be uploaded in each module / sub-module / section of the application which can be played at any given point of time through the browser.
2. A browser based / mobile based virtual simulated gamified environment will be created by the vendor so that fire awareness can be created across VSCDL user base.
3. Also information in the form of a downloadable PDF format shall be provided to the Users who may refer / download it for their own personal reference as and when needed.
4. It is required that the downloadable training content should have proper indexing and internal references, mapped with key words, in order to allow any User to search and reach the desired content with the help of those key words.

5. It envisaged that any User will be able to search and read the directions / information for only the part required by him/her rather than looking through the entire PDF document and manually searching for the right content.

7.8 Manpower Support for Change Requests

The implementation agency will have to support the system for a period of 5 years after the go-live or operational acceptance. In case any changes are to be made to the system in the interim, the implementation agency will have to handle the same with a change request process. In the event of any proposed change to the agreement, scope of work and SLAs, the implementation agency shall follow change request process as determined by VSCDL. The change shall include, but may not be limited to, changes in the scope of services as mentioned under various categories from time to time. The Implementation Agency must provide a change management system for monitoring change requests implementation, bug tracking and production support services.

Change Request can be raised by any VSCDL application user / stakeholder who will be responsible for obtaining approval for the change. The Implementation Agency and VSCDL shall consider the change in the context of the following parameter, namely whether the change is beyond the scope of Services and is suggested and applicable only after the testing, commissioning and certification of the Pilot Phase and the Project Go Live. The payment for the changes brought in after project certification and 'Phase Go Live' date will be calculated on the basis of man-month rate / device rates quoted by the Implementation Agency in its bid and estimated man-month effort/ number of deployed devices which is to be submitted by the Implementation Agency prior to taking up the change of control event and accepted by VSCDL. Change requests will be reported monthly/fortnightly to VSCDL or its nominated agencies, which will prioritize and review progress.

7.9 Handholding Support

During the Operations & Maintenance period manpower is required for supporting the project. The supporting engineer shall be responsible for:

1. Application maintenance and support services
2. Field level IT handholding services

The Implementation Agency shall ensure that functional support staff should be deployed at each VSCDL facility (Location List to be provided by VSCDL) for providing the IT handholding and manages the support services, as and when needed. The suggested profiles of the resources in the application maintenance and support team are given below:

Resource Profile	Role and Activities	Minimum Qualification
Project Manager	Single point of contact for all project related issues during the contract tenure and responsible for completion of project, developing the project plan	Graduate in Engineering or post-graduation in Management with minimum 8 years of IT experience, including minimum 4 years of experience of Project Management of large IT Systems PMP /Prince2 Certified

Field Engineer	Support	<p>Monitoring and support to VSCDLs fire staff in case of an incident. Resolving any software/ application/ panel related issues for the users at field level. They will also be responsible for handholding and supporting VSCDL staff for the smooth roll out.</p> <p>They will also be responsible for escalating the calls to the central application maintenance team. Any operational related hurdles also need to be highlighted to the quality circle and the project managers.</p>	Graduate with minimum 2 years of support experience in fire detection application systems, basic fire standards and protocols. Also should be conversant with navigation and communication systems and devices.
----------------	---------	---	---

During the course of the contract, if it becomes necessary to replace any of the Key Personnel, the Implementation Agency shall with due approval from VSCDL, provide as a replacement, a person of equivalent or better qualifications and experience than the resource being replaced / or proposed in the bid. Failure to replace personnel with the required qualifications shall result in a penalty as per the SLA defined in the contract.

The implementation agency shall provide an incident tracking system via a web interface available in real-time which will issue a trouble ticket once a complaint is booked successfully. The solution provider shall ensure that if any tickets pertain to action from their end, these calls are fully responded by the professional team. The updated status of each ticket should be made available on a web based incident management system for tracking. This system shall generate a monthly/quarterly/half yearly/yearly reports. Such reports shall be available for download in MS-Word, MS-Excel and PDF formats.

7.10 Preventive Maintenance & Monitoring of Application

The Implementation Agency will have to ensure 24x7 monitoring, operation and maintenance services of the application during the contract period. O & M of the Infrastructure will include:

1. IT Infrastructure Operations and Maintenance (including but not limited to Hardware, System Software, Application Software and other Infrastructure) for a period of 5 years from Go-Live.
2. Customize and implement a proper SLA monitoring tool in consultation with VSCDL Authorities during O&M Phase
3. Provisioning of Application Software, Hardware, and Networking etc. for integration of any intervention with application during Operation and Maintenance Phase.

While supporting the application, the Implementation Agency shall ensure the following at the data center:

1. System Administration, Maintenance and Management Services
2. Storage Administration and Management Services

3. Redundant operational server in case of failure.
4. Backup and Restoration Services
5. Services as per ISO 27001 and ISO 20000 compliance
6. Any other service required for smooth operations of the application.

The Implementation Agency has to ensure that the hardware for hosting the application shall cover the required warranty and AMC services. Implementation Agency must maintain the infrastructure at DC site on a day-to-day basis. The Implementation Agency shall send the reports of the components listed below. If any system has to be upgraded at DC that should be done by the bidder at no additional cost. The bidder will have to perform monitoring of the following devices/ systems.

1. Network
2. Sensors
3. All field devices
4. Monitoring Stations (Local and Central)
5. Data Center and its related Components

As part of Post-Implementation services, the Implementation Agency shall undertake Annual Technical Support for 5 years. The application maintenance and monitoring during the O & M period includes

1. Compliance to the Functional and Technical Requirements
2. Compliance to SLA
3. Application Software Maintenance, Problem identification and Resolution
4. Software Change and Version Control as per industry standards
5. Replacement of any faulty sensors, panels and output devices

The average application response time(s), application availability and other performance parameters are given in the SLAs. The application software should be designed to cater to the required load without any degradation of performance as explained above.

1. The database schema and design should be capable of handling current and future loads without any degradation of performance.
2. System should be upwardly scalable in the event of increased usage of the system or new business requirements.
3. The IA shall provide comprehensive report every month on the performance of the application and infrastructure
4. VSCDL may initiate, with prior notice, the audit of such measurements to their satisfaction.

At the end of each quarter during O & M phase, bidder will provide a report containing the following:

1. Updated system design documents, specifications, etc.
2. Latest source code, application deployment files, configuration files for entire solution
3. Update user manuals, administration manuals, training manuals etc.
4. Updated Bill of Material and locations where sensors, output devices, and panels are installed

5. Maintenance registers for all equipment including any required version/software, patch management / device replacement etc. will be the responsibility of the solution provider for the entire contract period at no extra cost to VSCDL.

7.11 Civil Works

1. Major Civil works are excluded from the scope however necessary excavations if required, making, closing of cut outs in the wall, necessary supports and grouting, drilling etc. are included in the scope.
2. All Civil works like chasing & making good the chases making pockets for grouting if necessary, grouting of panels etc. is included in scope.
3. Fabrication and fixing of supports, frames etc. are included in the scope.

7.12 Inspection, Testing and Maintenance of Devices

1. The IA shall be required to conduct inspection, testing and maintenance of all the devices and submit reports to VSCDL for all activities carried out along with their observations on a periodic basis during the entire contract period. These include –
 - a. Initial Installation Inspection Tests
 - b. Periodic Checks and Tests
 - i. Daily Check
 - ii. Weekly Check
 - iii. Quarterly Inspection and Test
 - iv. Annual Inspection Tests
 - v. Tests following an alarm or fire
 - c. Servicing and Maintenance
 - i. Cleaning
 - ii. Replacement and Spares

7.13 Compliance with National and International Standards

7.13.1 National Fire Standards

The bidder shall be responsible for ensuring compliance of the application with all national fire standards applicable for this project. A compliance certificate shall have to be issued from a licensed/authorized agency for all post-installation and thereafter commissioning of the system. These include –

1. IS 15908:2011 (Fire Control & Indicating Equipment)
2. National Building Code & Life Safety (Part 4)

Note - All fees and expenses pertaining to the licensed agency are to be borne by the bidder.

7.13.2 Wireless Communication Standards

The bidder shall be responsible for ensuring compliance of all field devices (Sensors, panels, etc.) with all national wireless standards applicable to this project as prescribed by the regulatory or governing authority of India. This includes –

1. Operating frequency of wireless equipment's installed.
2. Seamless communication required between Local Monitoring Station and Central monitoring station (wherever applicable).

The bidder should have all the requisite licenses from the concerned authorities in order to operate these equipment's for this project. In case, any license costs are required the same shall be borne by the bidder.

7.14 Creation of new Standard Operating Procedures (SOPs) or modification of existing SOPs

SOPs to be created as a consequence of this system, the bidder shall be required to solicit input from authorized personnel and document SOPs as per their requirements.

There might also be instances where Fire and Emergency Department might require to update their existing SOPs defined to accommodate changes introduced by the new system. The bidder shall be required to pro-actively identify all such SOPs that require update and submit the revised version after soliciting inputs from the authorized personnel.

7.15 Equipment & Material

1. All equipment and components shall be new, and the manufacturer's current model.
2. All equipment and components shall be installed in strict compliance with manufacturers' recommendations. The manufacturer's installation manuals shall be used for all wiring diagrams, schematics, physical equipment sizes, etc., before beginning system installation.
3. All Equipment shall be attached to walls and/or ceiling/floor assemblies and shall be held firmly in place (e.g., detectors shall not be supported solely by suspended ceilings). Fasteners and supports shall be adequate to support the required load.
4. Equipment shall be manufactured by an ISO 9001 Certified Company.

7.16 Wires

1. Wiring shall be in accordance with Local, state and national codes applicable and as recommended by the manufacturer of the fire alarm system. Number and size of conductors shall be as recommended by the fire alarm system manufacturer.
2. Wire and cable not installed in conduit shall have a fire resistance rating suitable for the installation.
3. All field wiring shall be completely supervised.
4. Terminal Boxes, Junction Boxes and Cabinets - All boxes and cabinets shall be listed by a National Recognized Testing Laboratory for their use and purpose.

7.17 Network Interface

1. The solution shall have an interfacing point to other local/remote devices. This shall allow for the use of remote virtual panel software, and for PC connection to upload/download field configuration programming of the system.
2. It shall be possible to interrogate the peer-to-peer network of wiring from any graphical display connected to the network. Interrogation shall include network ground voltage monitoring, data packets received, bad

packets, number of communication failures at each individual network node. This interrogation feature shall be historical from the date of installation, with technician reset capabilities while troubleshooting issues. Networks that do not provide a means for technicians to interrogate network wiring and problems shall not be considered acceptable.

7.18 Responsibility Matrix

#	Key Activities	Implementation Agency	VSCDL	Other Integrating Agency for ICCC and GIS Project	Project Management Consultant	Department of Fire and Safety, Health, Water in VMC
1	Project Kick Off	R/A	C	I	C	I
2	Deployment of Manpower	R/A	C	I	C	I
3	Assess the Requirement of IT Infrastructure and Non IT Infrastructure	R/A	C	C	C	C
4	Assessment of Processes	R/A	C	I	C	I
5	Assessment Software Requirements	R/A	C	I	C	I
6	Assess Integration Requirements	R/A	C	I	C	C
7	Assess the Connectivity Requirement of all Fire Stations and Control room	R/A	C	I	C	I
8	Assessment Network Laying Requirement	R/A	C	I	C	I
9	Assessment Training Requirement	R/A	C	I	C	I
10	Customization of Solution Architecture	R/A	C	I	C	I
11	Creation of Detailed Drawing	R/A	C	I	C	I
12	Development of Test Cases (Unit, System Integration and User Acceptance)	R/A	C	I	C	I
13	Preparation of Final Bill of Quantity and Material	R/A	C	I	C	I
14	SoP Preparation	R/A	C	C	C	I

15	Helpdesk Setup	R/A	C	I	C	I
16	Procurement of Equipment, Sensors, Software Licenses etc.	R/A	C	I	C	I
17	IT and Non-IT Infrastructure Installation	R/A	C	I	C	I
18	Development, Testing and Production Environment Setup	R/A	C	I	C	I
19	Software Application Customization (if any)	R/A	C	I	C	I
20	Development of Bespoke Solution (if any)	R/A	C	I	C	I
21	Integration with Third Party Services/Application	R/A	C	I	C	I
22	Unit and User Acceptance Testing	R/A	C	I	C	I
23	Implementation of Solutions	R/A	C	I	C	I
24	Preparation of User Manuals, Training Curriculum and Training Materials	R/A	C	I	C	I
25	Role-based Training(s) on use of Software	R/A	C	I	C	I
26	SoP Implementation	R/A	C	C	C	I
27	Integration of software to be used with existing softwares	R/A	C	C	C	I
28	Integration with GIS	R/A	C	C	C	I
29	Go Live	R/A	C	I	C	I
30	Operation and Maintenance of IT, Non IT Infrastructure and Applications	R/A	C	I	C	I
31	SLA and Performance Monitoring	R/A	C	I	C	I

32	Logging, Tracking and Resolution of Issues	R/A	C	I	C	I
33	Application Enhancement	R/A	C	I	C	I
34	Patch & Version Updates	R/A	C	I	C	I
35	Helpdesk Services	R/A	C	I	C	I

8. Work Completion Timeline and Payment Terms

The payment schedule and milestones are divided into two phases:

- i. Implementation Phase
- ii. Operations and Maintenance Phase

VSCDL shall issue a “Request Order” in writing, indicating the number of units of Hardware and Software to be supplied along with the location (Project Site). The VSCDL shall continue to issue such request until the full quantities of Hardware and Software specified in volume 2 within the variation limits of RFP is exhausted. Upon getting the Request Order, the SI shall promptly and as soon as possible within the lead time specified in the request order, supply, install and implement specified numbers of hardware and software at stated project site and commission the same. VSCDL shall specify the Lead Time in Request Order. The Lead Time of Request Order shall be decided in discussion with the Service Provider before the Request Order is placed. VSCDL’s decision in this regard shall be final but reasonable time shall be provided to the SI. Delay or non-performance will form the basis for application of Liquidated Damages. Tentative number of Request Orders and Lead Time as envisaged at this point of time is specified below.

Activities		Timelines for Completion of Milestones	Payment Schedule	Penalties
	To = Date of issuance of work order Tg = Date of Go-Live declared by VSCDL			
A	Project planning and mobilization	To+2 weeks	Nil	
B	Requirement Gathering	To + 6 Weeks	15% of Schedule C	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
C	Solution Design	To + 8 weeks	15% of Schedule C	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
D	Software Development and Customization	To + 12 weeks	15% of Schedule C	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract.

				The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
E	Site Preparation and Delivery of Hardware in (Schedule A,B,&F)	To + 14 weeks	60% of Schedule A+60% of Schedule B + 60% of Schedule F	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
F	Acceptance of Hardware and Installation (Schedule A,B,&F)	To + 18 weeks	20% of Schedule A+20% of Schedule B + 20% of Schedule F	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
G	UAT for Software	To + 22 weeks	20% of Schedule C	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
H	Capacity building and training	To + 24 weeks	75% of Schedule E	0.001% of total contract value per breach per batch.
I	IT and Fire Compliance before Go Live	To + 26 weeks	75% of Schedule D	0.01% of total contract value per breach.
I	Preparation of standard operating procedures	To + 28 weeks	10 % of Schedule C	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
J	Go Live	To + 30 weeks	10% of Schedule A+10% of Schedule B + 10% of Schedule F+ 15% of Schedule C +	0.01% of the contract value for the first week and 0.02% of the total contract value for every

			25% of Schedule D + 25% of Schedule E	subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
K	Q1-Y1 after go live	Tg + 3 Months	2.5% of Schedule A + 2.5% of Schedule B + 2.5% of Schedule F+ 2.5% of Schedule C + Quarterly Payment of Schedule H+ Quarterly Payment of Schedule H + Quarterly Payment for Schedule I	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
L	Q2-Y1 after go live	Tg + 6 Months	2.5% of Schedule A + 2.5% of Schedule B + 2.5% of Schedule F+ 2.5% of Schedule C + Quarterly Payment of Schedule H+ Quarterly Payment for Schedule I	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
M	Q3-Y1 after go live	Tg + 9 Months	2.5% of Schedule A + 2.5% of Schedule B + 2.5% of Schedule F+ 2.5% of Schedule C + Quarterly Payment of Schedule H+ Quarterly Payment for Schedule I	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
N	Q4-Y1 after go live	Tg + 12 Months	2.5% of Schedule A + 2.5% of Schedule B + 2.5% of Schedule F+ 2.5% of Schedule C + Quarterly Payment of Schedule H+ Quarterly Payment for Schedule I	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
O	O&M (Y2 Onwards)	O&M	Quarterly Payment of Schedule H+ Quarterly Payment for Schedule I	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent

				week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
--	--	--	--	--

Note – AMC will be applicable for 4th and 5th Year to be paid quarterly.

Disbursement of payment to the Implementation Agency is based on completion of tasks indicated in the implementation plan; Operations and Maintenance support plan and final handing over of O&M to the third party on completion at the end of five years of the contractual period.

Notes:

1. Adherence to timelines is critical for the success of the project.
2. No advance payment shall be made for staff mobilization.
3. If the Implementation Agency is liable for any penalty as per the SLA (refer to the related clause of this agreement), the same shall be adjusted from payments due to the Implementation Agency.
4. VSCDL will release the payment within 30 days of submission of valid invoice subject to the condition that invoice and all supporting documents produced are in order and work is performed as per the scope of the project and meeting the SLA Criteria. VSCDL shall be entitled to delay or withhold the payment of a disputed invoice or part of it delivered by Implementation Agency, when VSCDL disputes such invoice or part of it, provided that such dispute is bonafide
5. Payment will be made by Fire Department, while the work shall be certified by Fire Department, the Core Committee and the PMU
6. It is mandatory for the successful bidder to open a bank account in any of the banks approved by VSCDL for easy and quick payments. All payments under the contract will be made only in this bank account through Electronic Clearing System/RTGS/NEFT/CBS
7. VSCDL at its own discretion may decide to release the partial payment (upto 30%) for specific milestones, acceptance of which got delayed for reasons not attributable to the IA. In such cases the remaining 70% shall be released on full acceptance of that particular milestone by VSCDL.
8. No payment made by VSCDL herein shall be deemed to constitute acceptance by VSCDL of the system or any subsystem(s).
9. In case Go-Live is delayed, the corresponding operations and maintenance phase will start after the Go-Live has been completed.
10. A Project Implementation Committee (PIC) will be constituted which will be responsible for monitor the performance of the Implementation agency and recommend for the payment.
11. If the implementation agency is liable for any penalty/liquidated damages as per the SLA, the same shall be adjusted from monthly payments due to the service provider.
12. All payments shall be made for the corresponding to the goods or services actually delivered, installed, or operationally accepted, per the Contract Implementation Schedule, at unit prices and in the currencies specified in the Commercial Bids.

13. It is mandatory for the contractors to open a Bank Account in any of the banks approved by VSCDL for easy and quick payments. All payments under the contract will be made only on this Bank Account through Electronic Clearing System/ RTGS/ NEFT/ CBS.

9. Service Level Agreements

1. The purpose of this Service Level Requirements/Agreement (hereinafter referred to as SLR/SLA) is to clearly define the levels of service which shall be provided by the Implementation Agency to the Corporation for the duration of this contract period of the Project.
2. Timelines specified in the above section (Work Completion Timelines and Payment Terms) shall form the Service Levels for delivery of Services specified there-in.
3. All the payments to the Implementation Agency are linked to the compliance with the SLA metrics specified in this document.
4. The project Service Level Agreement are proposed to be performance based. For purposes of Service Level Agreement, the definitions and terms as specified along with the following terms shall have the meanings set forth below:
 - a. “Uptime” shall mean the time period for which the specified services / components with specified technical and service standards are available for LMS. Uptime, in percentage, of any component (Non IT and IT) can be calculated as:
 - b.
$$\text{Uptime} = \{1 - [(\text{System Downtime}) / (\text{Total Time} - \text{Planned Maintenance Time})]\} * 100$$
 - c. “Downtime” shall mean the time period for which the specified services / components with specified technical and service standards are not available for IWAFDAS Users, the scheduled outages / Planned Maintenance time planned in advance for core application, related infrastructure and link failures. This includes Servers, Routers, Firewall, Switches, all servers and any other IT and non-IT infrastructure, their subcomponents etc. at all Project locations etc. The planned maintenance time / scheduled downtime will include activities like software upgrades, patch management, security software installations etc.
 - d. The selected IA will be required to schedule ‘planned maintenance time’ with prior approval of VSCDL. This will be planned outside working time. In exceptional circumstances, VSCDL may allow the IA to plan scheduled downtime in the working hours.
 - e. “Incident” refers to any event / abnormalities in the functioning of the ILMS application, Infrastructure and services that may lead to disruption in normal operations.
 - f. “Helpdesk Support” shall mean the 24x7x365 centre which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.
 - g. “Response Time” shall mean the time incident is reported to the help desk and an engineer is assigned for the call.
 - h. “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) getting the confirmatory details about the same from the IA and conveying the same to the end user), the services related troubles during the first level escalation.
5. The resolution time shall vary based on the severity of the incident reported at the help desk. The severity would be as follows:
 - a. Critical / High: Solution down impacting critical business functions or multiple modules/functions down impacting users on daily operations or any module /functionality deemed as highly critical by VSCDL .
 - b. Medium: One module/functionality down impacting critical business functions having major impact on daily operations.

- c. Low: Loss of business functionality for less than 10 users impacting day to day operations or minor functionality down impacting less than 10 users.

6. The SLAs have been logically segregated in the following categories:

- a. System Development
- b. Deployment of Manpower
- c. System Performance
- d. Sensor/ Output Device/ Panel Performance
- e. Training
- f. Audit
- g. Helpdesk Support/Issue Response and Resolution
- h. Functional Support
- i. Change Request
- j. Reporting

Commencement of SLA: The SLA shall commence from implementation period itself for adherence to the implementation plan. The penalty will be deducted from the next payment milestone during the implementation period. During the O & M period, the penalty will be deducted from the quarterly payments.

System Development

Sr. No	Parameter	Metric	Basis	Penalty
1.	Adherence to planned implementation schedule. <ul style="list-style-type: none"> Project Initiation Team Mobilization User Acceptance Testing Implementation, Stabilization Operational Acceptance 	The delay for each milestone as per the planned schedule should not exceed more than a week without a justified reason agreed and approved by VSCDL. Thereafter for each week of delay, penalty will be levied.	Per Occurrence	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.
2.	Submission of deliverables as relevant to the individual milestones/stages Various deliverables such as <ul style="list-style-type: none"> Inception Report Survey Report Project Plan Quality Plan Design Documents SRS Test Cases and results User Manuals Training Manual Technical Documents etc. 	To be submitted within 10 days of the completion of the individual milestone.	Per Occurrence	0.01% of the contract value for the first week and 0.02% of the total contract value for every subsequent week subject to a maximum of 5% post which VSCDL may invoke annulment of the contract. The penalty will be levied for delay in all the waves and phases for reason attributable to the vendor.

Deployment of Manpower

Sr. No	Parameter	Metric	Basis	Penalty
1.	Mobilisation of the team for commencement of work	Within 2 weeks from the date of issue of the LoI/Purchase/Work Order	Per Occurrence	0.005% of the contract value for the first week and 0.01% of the total contract value for second week subject to a maximum delay of 2 weeks post which VSCDL may invoke annulment of the contract.
2.	Replacement of resources	Within 15 days of release of existing resource initiated either by VSCDL or the Implementation Agency. The resource should be of equivalent or higher qualification and experience.	Per occurrence	0.005% of the contract value per week of delay for deployment of alternate resource

System Performance

Sr. No	Parameter	Target	Basis	Penalty
1.	Average Response Time during peak usage hours as measured by EMS tool	Less than or equal to 10 seconds	Per occurrence. This will be calculated monthly after the implementation.	Per month penalty of 0.01 % of the total contract value will be levied upto a maximum of 5 % post which VSCDL may invoke Annulment of the contract. This will be deducted from the next payment milestone during the implementation period. During the O & M period, the penalty will be deducted from the quarterly payments.
2.	Application Uptime <ul style="list-style-type: none"> Database Server Uptime Application Server Uptime Web Server Uptime All SAN Storage Uptime Any other IT component in the Infrastructure Architecture 	>= 99.95%	Per occurrence. This will be calculated monthly after the implementation.	

Sensor and Device Performance

Sr. No	Parameter	Target	Basis	Penalty
1.	Average Uptime of all Sensors/ Output Devices/ Panels	>= 99.95%	Per occurrence. This will be calculated monthly after the implementation.	Per month penalty of 0.01 % of the total contract value will be levied upto a maximum of 5 % post which VSCDL may invoke Annulment of the contract. This will be deducted from the next payment

				milestone during the implementation period. During the O & M period, the penalty will be deducted from the quarterly payments.
2	Replacement of a faulty sensor equipment/ output devices/ panels	Within 24 hours of the incident	Per Occurance	Rs. 1000 per occurrence of failure to replace the sensor equipment/ output device/ panel

Audit

Sr. No	Parameter	Target	Basis	Penalty
1.	Third Party Audit Certificate for the entire system and the action taken report by the Implementation agency	Once every year	Per occurrence	0.01% of total contract value per breach.

Training

Sr. No	Parameter	Metric	Frequency/basis	Penalty
1.	Adherence to training timetable	95% of the batches at individual institutions to be conducted as per planned schedule.	Batches planned per institution	0.001% of total contract value per breach per batch.
2.	Training Feedback from Participants and training completion certification	75% of the participants in a batch to offer a feedback rating of 3 or above on a scale of 1 to 5.	Feedback Per batch	0.001% of total contract value per breach per batch.

Helpdesk Support/Issue Response and Resolution

Sr. No	Parameter	Target	Basis	Penalty
1.	Severity 3 Issue (Low)	Response Time <= 2 hours from the time the call is logged by the end user. Resolution Time <= 6 hours from the time the complaint/query is allocated for resolution by the helpdesk.	Per Incident	0.01% of total contract value for every additional 2 hours of delay subject to a maximum of 5% of the contract value post which VSCDL may invoke annulment of the contract.
2.	Severity 2 Issue (Medium)	Response Time <= 1 hour from the time the call is logged by the end user. Resolution Time <= 1 day from the time the complaint/query is	Per Incident	0.01% of total contract value for every additional day subject to a maximum of 5% of contract value post which VSCDL may invoke annulment of the contract.

		allocated for resolution by the helpdesk.		
3.	Severity 1 Issue (Critical)	Response Time ≤ 30 minutes from the time the call is logged by the end user. Resolution Time $\leq T$ (As agreed up on by VSCDL and IA) from the time the complaint/query is allocated for resolution by the helpdesk.	Per Incident	0.01% of total contract value for every additional T + 1 day delay subject to a maximum of 5% of contract value, post which VSCDL may invoke annulment of the contract.
4.	Average Call Lost Rate (Total No. Of calls lost because they were not attended by an operator / Total incoming calls) * 100	$\leq 1\%$	Per Month	0.005% of total contract value for every additional 1% call lost subject to a maximum of 5% of contract value, post which VSCDL may invoke annulment of the contract.

Functional Support

Sr. No	Parameter	Target	Basis	Penalty
1.	Satisfaction rating	Minimum satisfactory rating of 3 or above on a scale of 1 to 5 for the overall monthly performance of the Functional Support resource provided by the reporting officer.	Feedback received	0.001% of total contract value for each un-satisfactory report received.

Change Request

Sr. No	Parameter	Metric	Basis	Penalty
1.	Criticality of Change – Low	$\leq T+2$ weeks, where T is the timeframe for completion of the Change request as agreed upon by VSCDL and the Implementation Agency	Weekly per Occurrence	0.01% of total contract value per week for the first two weeks for each occurrence, 0.05% of total contract value per week for every subsequent week, subject to a maximum of 5% post which VSCDL may invoke annulment of the contract.
2.	Criticality of Change – Medium	$\leq T+1$ weeks, where T is the timeframe for completion of the Change request as agreed upon by VSCDL and the Implementation Agency	Weekly per Occurrence	0.02% of total contract value per week for the first two weeks for each occurrence, 0.05% of total contract value per week for every subsequent week, subject to a maximum of 5% post which VSCDL may invoke annulment of the contract.
3.	Criticality of Change – High	$\leq T$ weeks, where T is the timeframe for completion of the Change request as agreed upon by VSCDL and the Implementation Agency	Weekly per Occurrence	0.03% of total contract value per week for the first two weeks for each occurrence, 0.05% of total contract value per week for

				every subsequent week, subject to a maximum of 5% post which VSCDL may invoke annulment of the contract.
--	--	--	--	--

SLA for Cameras

Category	Service Description	Level	Measuring Duration	Measurement			Measured by
				Baseline	Lower	Critical	
Camera, Video Feed Uptime and Quality	Uptime per camera (live feed available irrespective of bandwidth or last mile issues, which are in control of SI)		Daily	97%	>= 92% to <97%	<92%	VMS/CCC
Camera, Video Feed Uptime and Quality	At CCC: Live camera feed available from selected cameras for viewing) at any given time		Daily	97%	>=92% to <97%	<92%	VMS/ Physical Checks
Camera, Video Feed Uptime and Quality	Quality of video feeds (bad feeds due to video jitter, dim, blurred, unfocused, obstructed, non-aligned feeds*)		Daily	97%	>=94% to 97%	<94%	VMS/CCC
Camera, Video Feed Uptime and Quality	Average frame rate maintained for viewing (of all daily recorded feeds)		Daily	88%	80.01 to 88 %	<80%	VMS
Camera, Video Feed Uptime and Quality	Average frame rate maintained for recording		Daily	95%	90 to 95%	<90%	VMS
Camera, Video Feed Uptime and Quality	Video stream latency refers to the average time required for transmission of video feed from one point to another		Daily	=<40 ms	>40 to 50 ms	>50 ms	VMS

Camera, Video Feed Uptime and Quality	Uptime per camera (live feed available irrespective of bandwidth or last mile issues, which are in control of SI)	Daily	99%	>= 96.5% to <99%	<96%	VMS
Application Performance	Overall application(s) availability at CCC	Daily	<2 sec	2.01 to 4.0 secs	>4 sec	EMS
Application Performance	Maximum time for user login at Command Center	Daily	<5 secs	5.01 to 10.0 secs	>10 secs	EMS
Application Performance	Maximum time for surveillance application(s) opening, this includes any application deployed for the project at CCC	Daily	<2 sec	2.01 to 5.0 sec	>5 secs	EMS
Application Performance	Menu navigation, window/ screen opening, screen navigation (average) at CCC	Daily	<2 sec	2.01 to 6.0 sec	>6 secs	EMS
Application Performance	Retrieval of video feeds at CCC (based on complexity of query)	Daily	Simple query: <5 sec Medium query: <30 sec High query: <60 sec	Simple query: 5.01 to 10 sec Medium query: 10.01 to 15 sec High query: <15.1 sec to 60 sec	Simple query: >10 sec Medium query: >15 sec High query: >60 sec	VMS
Application Performance	Reports generation response time (alerts/MIS/logs, etc.)	Daily	<3 sec	3.01 to 5.0 sec	>5 sec	VMS
Application Performance	Maximum time for successful camera settings modification (in online mode)	Daily	99%	>=97% to <99%	<97%	Work Logs

End-User Equipment Uptime	Monitoring workstations / Desktops	Daily	99%	>=97% to <99%	<97%	NMS
End-User Equipment Uptime	LED display screens	Daily	99.9%	>=99.5% to <99.9%	<99.5%	EMS

Reporting during pre-implementation, implementation and post implementation phases (including Operations and Maintenance Phase)

Type	Measurement	Penalty
Weekly Status Report	Delivered on a weekly basis	No Penalty
Monthly Status Report	Delivered at monthly intervals by the 5 th of every month with the details of the previous month. The format of the report shall be mutually agreed between VSCDL and the IA	0.001% of total contract value per additional week delay subject to a maximum delay 8 weeks

Note:

- The down time will be calculated on monthly basis. Non-adherence to any of the services as mentioned below will lead to penalty as per the SLA clause and will be used to calculate downtime. The downtime calculated shall not include the following
 - Down time due to hardware/software and application which is owned by VSCDL at their premises
 - Negligence or other conduct of VSCDL or its agents, including a failure or malfunction resulting from applications or services provided by VSCDL or its vendors.
 - Failure or malfunction of any equipment or services not provided by the Bidder.
- However, it is the responsibility/ onus of the selected Bidder to prove that the outage is attributable to VSCDL. The selected Bidder shall obtain the proof authenticated by the VSCDL's official that the outage is attributable to the VSCDL.
- The maximum penalty will be up to 5% of total project cost as per the Commercial bid submitted by the Bidder
- The Agency shall deploy sufficient manpower suitably qualified and experienced in shifts to meet the SLA. Agency shall appoint as many team members as deemed fit by them, to meet the time Schedule and SLA requirements.
- Once a maximum penalty of 5% of the contract value is reached, VSCDL has the right to call for the annulment of contract.

9.1 Professional Project Management

Implementation Agency shall execute the project with complete professionalism and full commitment to the scope of work and the prescribed service levels. Implementation Agency shall attend regular Project Review Meetings scheduled by VSCDL and shall adhere to the directions given during the meeting. Following responsibilities are to be executed by the Implementation Agency in regular manner to ensure the proper management of the project:

- Finalization of the Project plan in consultation with VSCDL and its consultant. Project Plan should consist of work plan, communication matrix, timelines, Quality Plan, Configuration Management Plan, etc.
- Plan and deploy the resources in conjunction with the Project Plan and to execute roles and responsibilities against each activity of the project plan

- c. Preparation and regular update of the Risk Register and the Mitigation Plan. Timely communication of the same to all the identified project stakeholders
- d. Submission of Weekly Project Progress Reports
- e. Monthly Compliance report, which will cover compliances to Project Timelines, Project Team, Hardware and Software delivered, SLAs, etc.

9.2 Use and Acquisition of Assets during the term

The Implementation Agency shall:

1. Take all reasonable and proper care of the entire hardware and software, network or any other information technology infrastructure components used for the project and other facilities leased/owned by the Implementation Agency exclusively in terms of the delivery of the services as per this CA (hereinafter the “Assets”) in proportion to their use and control of such Assets which will include all upgrades/enhancements and improvements to meet the needs of the project arising from time to time
2. Term “Assets” also refers to all the hardware / Software / furniture / data / documentations / manuals / catalogues / brochures / or any other material procured, created or utilized by the Implementation Agency or VSCDL for implementation of Integrated Wireless Addressable Fire Detection and Alarm System.
3. Keep all the tangible Assets in good and serviceable condition (reasonable wear and tear excepted) suitably upgraded subject to the relevant standards as stated in the bid to meet the SLAs mentioned in the contract and during the entire term of the Agreement
4. Ensure that any instructions or manuals supplied by the manufacturer of the Assets for use of Assets and which are provided to the Implementation Agency will be followed by the Implementation Agency and any person who will be responsible for the use of the Asset
5. Take such steps as may be recommended by the manufacturer of the Assets and notified to the Implementation Agency or as may be necessary to use the Assets in a safe manner
6. To the extent that the Assets are under the control of the Implementation Agency, keep the Assets suitably housed and in conformity with any statutory requirements from time to time applicable to them
7. 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
8. Use the Assets exclusively for the purpose of providing the Services as defined in the contract
9. Ensure the integration of the software with hardware to be setup and the current Assets in order to ensure the smooth operations of the entire solution architecture to provide efficient services to VSCDL of this Project in an efficient and speedy manner
10. Implementation Agency shall not use VSCDL data to provide services for the benefit of any third party, as a service bureau or in any other manner

9.3 Security and safety

1. The Implementation Agency will comply with the directions issued from time to time by VSCDL and the standards related to the security and safety in so far as it applies to the provision of the Services
2. Adherence to basic e-Governance Guidelines and Standards for data structure (if any) shall be adhered to.
3. Implementation Agency shall also comply with VSCDL / Government of Gujarat’s / Government of India’s information technology security and standard policies in force from time to time as applicable. VSCDL shall share the relevant guidelines and standards to the Implementation Agency upon signing of the CA.

4. Implementation Agency shall use reasonable endeavours to report forthwith in writing to all the partners / contractors about the civil and criminal liabilities accruing due to any unauthorized access (including unauthorized persons who are employees of any Party) or interference with VSCDL's data, facilities or Confidential Information.
5. The Implementation Agency shall upon reasonable request by VSCDL or his/her nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.
6. Implementation Agency shall promptly report in writing to VSCDL 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 VSCDL.

9.4 Indemnity

The Implementation Agency agrees to indemnify and hold harmless VSCDL, its officers, employees and agents(each an "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

1. Any mis-statement or any breach of any representation or warranty made by the Implementation Agency or
1. The failure by the Implementation Agency to fulfill any covenant or condition contained in this Agreement, including without limitation the breach of any terms and conditions of this Agreement by any employee or agent of the Implementation Agency. Against all losses or damages arising from claims by third Parties that any Deliverable (or the access, use or other rights thereto), created by Implementation Agency pursuant to this Agreement, or any equipment, software, information, methods of operation or other intellectual property created by Implementation Agency or sub-contractors pursuant to this Agreement, or the SLAs (I) infringes a copyright, trade mark, trade design enforceable in India, (II) infringes a patent issued in India, or (III) constitutes misappropriation or unlawful disclosure or use of another Party's trade secrets 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 the Hosted ILMS Project by itself or through other persons other than Implementation Agency or its sub-contractors; (B) Third Parties (i.e., other than Implementation Agency or sub-contractors) at the direction of VSCDL, or
2. Any compensation / claim or proceeding by any third party against VSCDL arising out of any act, deed or omission by the Implementation Agency or
3. Claim filed by a workman or employee engaged by the Implementation Agency for carrying out work related to this Agreement. For the avoidance of doubt, indemnification of Losses pursuant to this section shall be made in an amount or amounts sufficient to restore each of the Indemnified Party to the financial position it would have been in had the losses not occurred.

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

9.5 Third Party Claims

1. Subject to Sub-clause (b) below, the Implementation Agency (the "Indemnified Party") from and against all losses, claims litigation and damages on account of bodily injury, death or damage to tangible personal

property arising in favour or any person, corporation or other entity (including the Indemnified Party) attributable to the Indemnifying Party's performance or non-performance under this Agreement or the SLAs.

4. The indemnities set out in Sub-clause (a) above shall be subject to the following conditions:
 - a. 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;
 - b. The Indemnified Party shall, at the cost and expenses of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the defence of such claim including reasonable access to all relevant information, documentation and personnel. The indemnifying party shall bear cost and expenses and fees of the Attorney on behalf of the Indemnified Party in the litigation, claim.
 - c. If the Indemnifying Party does not assume full control over the defence of a claim as provided in this Article, the Indemnifying Party may participate in such defence 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.
 - d. 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;
 - e. Implementation Agency hereby indemnify and hold indemnified VSCDL harmless from and against any and all damages, losses, liabilities, expenses including legal fees and 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.
 - f. 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 and include an unconditional release to the Indemnified Party from the claimant for all liability in respect of such claim; and (b) include any appropriate confidentiality agreement prohibiting disclosure of the terms of such settlement;
 - g. 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; and
 - h. 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 and defences of the Indemnified Party with respect to the claims to which such indemnification relates;
 - i. 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, and on the invocation of the Performance Bank Guarantee, the Indemnifying Party shall be subrogated to all rights and defences of the Indemnified Party with respect to the claims to which such indemnification relates.

9.6 Publicity

Any publicity by the Implementation Agency in which the name of VSCDL is to be used should be done with the explicit written permission of VSCDL authorities.

9.7 Warranties

1. The Implementation Agency warrants and represents to VSCDL that:
 - a. It has full capacity and authority and all necessary approvals to enter into and to perform its obligations under this Agreement;
 - b. This Agreement is executed by a duly authorized representative of the Implementation Agency;
 - c. It shall discharge its obligations under this Agreement with due skill, care and diligence so as to comply with the service level agreement.
2. In the case of the SLAs, the Implementation Agency warrants and represents to VSCDL, that:
 - a. The Implementation Agency has full capacity and authority and all necessary approvals to enter into and perform its obligations under the SLAs and to provide the Services;
 - b. The SLAs shall be executed by a duly authorized representative of the Implementation Agency;
 - c. The Services will be provided and rendered by appropriately qualified, trained and experienced personnel as mentioned in the bid;
 - d. Implementation Agency has and will have all necessary licenses, approvals, consents of third Parties free from any encumbrances and all necessary technology, hardware and software to enable it to provide the Services;
 - e. The Services will be supplied in conformance with all laws, enactments, orders and regulations applicable from time to time;
 - f. Implementation Agency will warrant that the solution provided under the contract is new, of the most recent higher version /models and incorporate all recent improvements in design and materials unless provided otherwise in the contract.
 - g. The Implementation Agency shall ensure defect free operation of the entire solution and shall replace any such components, equipment's, software and hardware which are found defective and during the entire contract period the Implementation Agency shall apply all the latest upgrades/patches/releases for the software after appropriate testing. No additional costs shall be paid separately for the warranty other than what are the costs quoted by the Implementation Agency and as specified in the contract.
 - h. If the Implementation Agency uses in the course of the provision of the Services, components, equipments, software and hardware manufactured by any third party and which are embedded in the Deliverables or are essential for the successful use of the Deliverables, it will pass through third party manufacturer's Warranties relating to those components, equipment, software and hardware to the extent possible.
3. Notwithstanding what has been stated elsewhere in this Agreement and the Schedules attached herein, in the event the Implementation Agency is unable to meet the obligations pursuant to the Implementation of the ILMS Project, Operations and Maintenance Services and any related scope of work as stated in this Agreement and the Schedules attached herein, VSCDL will have the option to invoke the Performance Guarantee after serving a written notice of thirty (30) days to the Implementation Agency.
4. All equipment's shall be under warranty for first three years.

9.8 Force Majeure

The Implementation Agency shall not be liable for forfeiture of its Performance Guarantee, imposition of liquidated damages or termination for default, if and to the extent that it's delay in performance or other failure

to perform its obligations under the contract is the result of an event of Force Majeure. For purposes of this Clause, “Force Majeure” means an event beyond the “reasonable” control of the Implementation Agency, not involving the Implementation Agency’s fault or negligence and not foreseeable. Unforeseen circumstances or causes beyond the control of the Implementation Agency include but are not limited to acts of God, war, riot, acts of civil or military authorities, fire, floods, accidents, terrorist activity, strikes or shortages of transportation facilities, fuel, energy, labor or material.

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

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

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

9.9 Resolution of Disputes

VSCDL and the Implementation Agency shall make every attempt to resolve dispute amicably, by direct information, negotiations of any disagreement or dispute arising between them under or in connection with this agreement.

All differences disputes arising under and out of these present, or in connection with this agreement shall be referred to the Hon. Municipal Commissioner of VSCDL as a sole Arbitrator. If the Bidder doesn’t agree with the opinion of the Municipal Commissioner, VSCDL, the matter shall be referred to two Arbitrators: one Arbitrator to be nominated by VSCDL and the other to be nominated by the Bidder under the provisions of the Arbitration and Reconciliation Act of 1956 and the decision shall be final and binding on the parties.

9.10 Risk Purchase Clause

In the event Implementation Agency fails to execute the project as stipulated in the CA, or as per the directions given by VSCDL from time to time, VSCDL reserves the right to procure similar services from the next eligible Bidder or from alternate sources at the cost of the Implementation Agency. Before taking such a decision, VSCDL shall serve a notice period of one month to the Implementation Agency. Implementation Agency’s liability in such case would not be higher than 50% of the total contract value.

9.11 Limitation of Liability towards VSCDL

The Implementation Agency’s liability under the resultant Agreement shall be determined as per the Law in force for the time being. The Implementation Agency shall be liable to VSCDL for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the Implementation Agency and its employees, including loss caused to VSCDL on account of defect in goods or deficiency in services on the part of

Implementation Agency or his agents or any person / persons claiming through or under said Implementation Agency. However, such liability of Implementation Agency shall not exceed the total value of the Agreement.

9.12 Conflict of Interest

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

9.13 Data Ownership

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

The ownership of the application for the three sub-systems and the data shall rest with VSCDL.

9.14 Fraud and Corruption

VSCDL requires that Implementation Agency must observe the highest standards of ethics during the execution of the contract. In pursuance of this policy, VSCDL 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 VSCDL in contract executions.

“Fraudulent practice” means a misrepresentation of facts, in order to influence a procurement process or the execution of a contract, to VSCDL, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificially high or non-competitive levels and to deprive VSCDL of the benefits of free and open competition.

“Undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by VSCDL with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and

“Restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

“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 Implementation Agency has indulged into the Corrupt / Fraudulent / Undesirable / Coercive practices, it will be a sufficient ground for VSCDL for termination of the contract and initiate black-listing of the vendor.

9.15 Exit Management

1. 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 Implementation Agency. The exit management period ends on the date agreed upon by VSCDL or three months after the beginning of the exit management period, whichever is earlier.

2. Confidential Information, Security and Data

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

- a. Information relating to the current services rendered and performance data relating to the performance of the services; documentation relating to the project, project's customized source code; any other data and confidential information created as part of or is related to this project;
- b. Project data as is reasonably required for purposes of the project or for transitioning of the services to its replacing successful Bidder in a readily available format.
- c. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable VSCDL and its nominated agencies, or its replacing vendor to carry out due diligence in order to transition the provision of the Services to VSCDL or its nominated agencies, or its replacing vendor (as the case may be).
- d. The Implementation Agency shall retain all of the above information with them for 30 days after the termination of the contract, post which the provider has to wipe/purge/delete all information created or retained as part of this project.
- e. Implementation Agency will sign a Non-Disclosure Agreement with VSCDL IT Department. The format for the same has been included in Annexure VII.

3. Rights of Access to Information

At any time during the exit management period, the Implementation Agency will be obliged to provide an access of information to VSCDL and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / Software / Active / passive), documentations, manuals, catalogues, archive data, Live data, policy documents or any other material related to implementation of ILMS for VSCDL.

4. Exit Management Plan

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

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

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

9.16 Termination of contract

VSCDL 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 Implementation Agency and terminate the contract either in whole or in part:

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

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

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

In the event of termination of this contract for any reason whatsoever, VSCDL 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 Implementation Agency shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to VSCDL and/ or succeeding vendor, as may be required, to take over the obligations of the Implementation Agency in relation to the execution/ continued execution of the requirements of this contract.

9.17 Miscellaneous

1. Confidentiality

“Confidential Information” means all information including Project Data (whether in written, oral, electronic or other format) which relates to the technical, financial and operational affairs, business rules, citizen information, design rights, know-how and personnel of each Party and its affiliates which is disclosed to or otherwise learned

by the other Party or its subcontractors (whether a Party to the contract or to the SLA) in the course of or in connection with the contract (including without limitation such information received during negotiations, location visits and meetings in connection with the contract or to the SLA) or pursuant to the contract to be signed subsequently.

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

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

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

- a. Is or becomes generally available to the public through no breach of this Article by the Recipient; and
- b. Was in the recipient's possession free of any obligation of confidence prior to the time of receipt of it by the Recipient hereunder; and
- c. Is developed by the Recipient independently of any of discloser's Confidential Information; and
- d. Is rightfully obtained by the Recipient from third Parties authorized at that time to make such disclosure without restriction; and
- e. Is identified in writing by the Discloser as no longer proprietary or confidential; or
- f. 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 and regulatory requirement to disclose so as to allow the Discloser reasonable opportunity to contest such disclosure.

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

- a. Its employees, agents and independent contractors and to any of its affiliates and their respective independent contractors or employees; and
- b. Its professional advisors and auditors, who require access for the purposes of this Agreement, whom the relevant Party has informed of its obligations under this Article and in respect of whom the relevant Party has informed of its obligations under this Article has used commercially reasonable efforts to ensure that they are contractually obliged to keep such Confidential Information

confidential on terms substantially the same as set forth in this Article. Either Party may also disclose confidential Information or any entity with the other Party's prior written consent.

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

2. Standards of Performance

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

3. Sub Contracts

Sub-contracting is permitted. The Implementation Agency shall seek prior approval from VSCDL for sub-contracting any work, if not already specified in the bid. However, such sub-contracting shall not relieve the Implementation Agency from any liability or obligation under the Contract. The Implementation Agency shall be solely responsible for the work carried out by subcontracting under the contract.

4. Care to be taken while working at VSCDL Office

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

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

5. Compliance with Labour regulations

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

6. 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.

7. 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.

8. Notices

Any notice or other document, which may be given by either Party under this Agreement, shall be given in writing in person or by pre-paid recorded delivery post. In relation to a notice given under this Agreement, any such notice or other document shall be addressed to the other Party's principal or registered office address as set out below-

VSCDL:

CEO, Vadodara Smart City Development Ltd. Vadodara

Tel: -----

Fax: -----

Implementation Agency:

Tel: -----

Fax: -----

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

9. Personnel/Employees

- a. Personnel/employees assigned by Implementation Agency to perform the services shall be employees of Implementation Agency and/or its sub-contractors, and under no circumstances will such personnel be considered as employees of VSCDL. Implementation Agency shall have the sole responsibility for supervision and control of its personnel and for payment of such personnel's employee's entire compensation, including salary, legal deductions withholding of income taxes and

social security taxes, worker's compensation, employee and disability benefits and the like and shall be responsible for all employer obligations under all laws as applicable from time to time. VSCDL shall not be responsible for the above issues concerning to personnel of Implementation Agency.

- b. Implementation Agency shall use its best efforts to ensure that sufficient Implementation Agency personnel are employed to perform the Services, and that, such personnel have appropriate qualifications to perform the Services. VSCDL or its nominated agencies shall have the right to require the removal or replacement of any Implementation Agency personnel performing work under this Agreement. In the event that VSCDL requests that any Implementation Agency personnel be replaced, the substitution of such personnel shall be accomplished pursuant to a mutually agreed upon schedule and upon clearance of the personnel based on profile review and personal interview by VSCDL or its nominated agencies as per defined SLAs. The Implementation Agency shall depute quality team for the project and as per requirements VSCDL shall have the right to ask Implementation Agency to change the team.
- c. Management (Regional Head / VP level officer) of Implementation Agency needs to be involved in the project monitoring and should attend the review meeting at least once in a month.
- d. The profiles of resources proposed by Implementation Agency in the technical bid, which are considered for Technical bid evaluation, shall be construed as 'Key Personnel' and the Implementation Agency shall not remove such personnel without the prior written consent of VSCDL. For any changes to the proposed resources, Implementation Agency shall provide equivalent or more experienced resources in consultation with VSCDL. No replacement in first three months for Key Personnel and not more than one replacement in first six months of the project. The penalty applicable for replacement of 'Key Personnel' within the first three months of the contract shall be Rs. 1,00,000 per change in resource. Maximum one replacement is permissible between fourth and six months. More than one replacement same penalty will be applicable.
- e. Except as stated in this clause, nothing in this Agreement will limit the ability of Implementation Agency freely to assign or reassign its employees; provided that Implementation Agency shall be responsible, at its expense, for transferring all appropriate knowledge from personnel being replaced to their replacements. VSCDL shall have the right to review and approve Implementation Agency's plan for any such knowledge transfer. Implementation Agency shall maintain the same standards for skills and professionalism among replacement personnel as in personnel being replaced.
- f. Each Party shall be responsible for the performance of all its obligations under this Agreement and shall be liable for the acts and omissions of its employees and agents in connection therewith.

10. Variations and Further Assurance

- a. No amendment, variation or other change to this Agreement or the SLAs shall be valid unless made in writing and 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 and waiver and to do all other things which shall or may be reasonably required to complete and deliver the obligations set out in the Agreement or the SLAs.

11. Severability and 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 and effect. The relevant Parties shall negotiate in good faith in order to agree to substitute for any illegal, invalid or unenforceable provision a valid and enforceable provision which achieves to the greatest extent possible the economic, legal and commercial objectives of the illegal, invalid or unenforceable provision or part provision within seven working days.
- b. No failure to exercise or enforce and 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.

12. 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 or by implication intended to come into effect or continue in effect after such expiry or termination.

9.18 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 Vadodara courts only.

9.19 Additional Security Deposit

The person/persons whose tender may be accepted (hereinafter called the Contractor, which expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators, and assigns) shall (A) within 10 days (which may be extended by the Superintending Engineer concerned up to 15 days if the Superintending Engineer thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Executive Engineer in cash or Govt. securities endorsed to the Executive Engineer (if deposited for more than 12 months) of sum sufficient which will make up the full security deposit specified in the tender or (B) (Permit Government at the time of making any payment to him for work done under the contract to deduct such as will amount to 4% percent of all moneys so payable such -deductions to be held by Government by way of security deposit) Provided always that in the event of the contractor depositing a lump sum by way of security deposit as contemplated at (A) above, then and in such case, if the sum so deposited shall not amount to 4% per cent of the total estimated cost of the work, it shall be lawful for Government at the time of making any payment to the contractor for work done under the contract to make up the full amount of 4% per cent by deducting a sufficient sum from every such payment as last aforesaid until the full amount of the security deposit is made up. All compensation or other sums of money payable by the contractor to Government under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due or may become due by Government to the contractor under any either contract or transaction of any nature of any account whatsoever and in the event of his security deposit being reduced by reasons of any such deduction or sale as aforesaid, the contractor shall, within ten days thereafter, make good in cash or Government securities endorsed as aforesaid any sum or sums which, may have

been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to, when paid in cash may, at the cost of the depositor, be converted into interest bearing securities provided that the depositor has expressly desired this in writing.

The Security deposit will not be accepted in forms of insurance company bonds. If the amount of the security deposit to be paid in a lump sum within the period specified in the bid data sheet above is not paid by the tenderer/contractor already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts. The amount of the security deposit lodged by a contractor shall be refunded along with the payment of the final bill, if the date up to which the contractor has agreed to maintain the work in good order is over.

The amount of security deposit retained by the Government shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete rectification work within the period up to which the contractor has agreed to maintain the work in good order, then, subject to provisions of clauses 17 and 20 hereof the amount of Security Deposit retained by Government shall be adjusted towards the excess cost incurred by the department on rectification work.

9.20 Compensation for Delay

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall through the stipulated period of the contract be proceeded with, with all due diligence (time being deemed to be the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Superintending Engineer (whose decision in writing shall be final) may decide, of amount of the estimated cost of the whole work as shown by tenderer for every day that the work remains uncompleted, or unfinished after the proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete. The Contractor should complete the work as per phase period given below, which is arrived from the bar chart.

1. Design, manufacturing of all materials and supply of all materials at site. (As and when required)
2. Erection, testing, and commissioning (As and when required)

**** Note:** The quantity of the work to be done within a particular time to be specified above shall be fixed and inserted in the blank space kept for the purpose by the Officer competent to accept the contracts after taking into consideration the circumstances of each case abide by the programme of detailed process laid down by the Executive Engineer.

In the event of the contractor failing to comply with this conditions he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Superintending Engineer (whose decision in writing shall be final) may decide of the said estimated cost of the whole work for every day that the due quantity of work remains incomplete provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10 per cent of the estimated cost of the work as shown in the tender. Superintending Engineer should be the final authority in this respect, irrespective of the fact that the tender is accepted by Chief Engineer. /Addl. Chief Engineer / Superintending Engineer / Executive Engineer of Assistant Engineer/Deputy Engineer.

9.21 Action on Complete Forfeiture of Security Deposit

In any case in which under any clause of- this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by

instalments or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause the Engineer, on behalf of the VSCDL, shall have power to adopt any of the following courses, as he may deem best suited to the interest of VSCDL -

- a) To rescind the contract (for which rescission notice in writing to the contractor under the head of Executive Engineer shall be conclusive evidence) and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of Government.
- b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the un-executed part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.
- c) To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor. In case the contract shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors the amount of excess shall be deducted from any money due to the contractor, by VSCDL under the contract or otherwise howsoever or from his security deposit or the sale proceeds thereof provided, however, that contractor shall have no claim against VSCDL even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clause (a) (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advance on account of or with a view to the execution of the work or the performance of the contract.

9.22 Stamp Duty Payment

The stamp duty payable for the contract shall be borne by the Implementation Agency IN WITNESS whereof the parties hereto have signed this on the day, month and year first herein above written.

Signed, sealed and delivered

By -----

-----,

For and on behalf of VSCDL

Signed, sealed and delivered

By -----

For and on behalf of the “Implementation Agency”,

Witnesses:

(1)

(2)

Attachments to the Agreement:

5. Scope of Services for the Implementation Agency
6. Detail Commercial bid of the Implementation Agency accepted by VSCDL
7. Corrigendum Document published by VSCDL subsequent to the bid for this work
8. Bid Document of VSCDL for this work
9. LoI issued by VSCDL to the successful Bidder
10. The successful Bidder’s “Technical Bid” and “Commercial Bid” submitted in response to the bid

10. Annexure I: Formats for Pre-Qualification Bid

10.1 Bid Cover Letter

<<To be printed on Lead Bidder Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Subject: "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city".

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

Dear Sir,

Having examined the Bid document (and the clarification / corrigendum issued thereafter, if any), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the Bid document for the Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city. We attach hereto our responses to pre-qualification requirements and technical and 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 VSCDL, 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 VSCDL 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 (and subsequent clarification/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.

Yours sincerely,

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mail Address :

10.2 Pre-Qualification Documents Checklist

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
1.	DD of INR 11,800/- (Rupees Eleven Thousand Eight Hundred Only/-) as Tender fee (in separate envelop)		
2.	EMD of INR 12,30,000/- (Rupees Twelve Lakhs and thirty thousand only) (Form PQ_1)		
3.	Bid Cover Letter		
4.	Power of Attorney/board resolution to the authorized signatory of the bid		
5.	Copy of certificate of incorporation (in case of a consortium all the members have to submit) (Form PQ_2) For global companies, equivalent certificate in the country of incorporation		
6.	Power of Attorney for lead bidder of consortium (Form PQ_3)		
7.	Consortium Agreement with clearly defined roles and responsibilities of each consortium partner		
8.	Certificate from the statutory auditor/CA specifying the (a) overall annual turnover for last 3 audited financial years (FY 2016-17, 2017-18 and 2018-19), (b) turnover from ICT and CAD software business (#) for last 3 audited financial years (FY 2016-17, 2017-18 and 2018-19), (c) net worth for last 3 financial years (FY 2016-17, 2017-18 and 2018-19) (Form PQ_4, in case of a consortium all the members have to submit)		
9.	Details of the projects executed (Form PQ_5 and PQ_6) along with Work order with full BoQ, contract agreement and copy of invoice submitted to the client (for projects where the invoice copy is not available, the work order date should be 1 year before the released date of this RFP)		
10.	Declaration that the firm is not blacklisted by Central Government or any State Government organization/ department in India at the time of submission of the bid (Form PQ_7, in case of a consortium all the members have to submit)		
11.	Declaration on stamp paper, for bidder not terminated, not being insolvent or in receivership or bankrupt (Form PQ_8, in case of a consortium all the members have to submit)		
12.	Copy of audited balance sheet for last three financial years 2016-17, 2017-18 and 2018-19 (in case of a consortium all the members have to submit)		
13.	Copy of the audited profit & loss statements for last three financial years 2016-17, 2017-18 and 2018-19 (in case of a consortium all the members have to submit)		
14.	Supporting documents like rent agreement/electricity bill/self-declaration on company's letterhead to be submitted for local office in Vadodara OR Undertaking from authorized signatory, to open local office with warehouse facility within 30 days from issuance of LoI, to be submitted		
15.	Copy of valid GST registration certificate		

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
16.	Copy of PAN card along with documentary proof of Income Tax returns for the last three financial years i.e. 2016-17, 2015-16, 2014-15.		

10.3 PQ_1: Bank Guarantee for Earnest Money Deposit (EMD)

To,

<Name>
 <Designation>
 <Address>
 <Phone No.>
 <Fax No.>
 <Email ID>

Whereas <<name of the bidder>> (hereinafter called 'the System Integrator') has submitted the bid for submission of Tender <<tender number>> dated <<date>> for <<name of the assignment>> (hereinafter called "the Bid") to <<name of purchaser>>.

Know all Men by these presents that we <<name of company>> having our office at <<address>> (hereinafter called "the Bank") are bound unto the << purchaser >> (hereinafter called "the Purchaser") in the sum of INR <<amount in figures>> (Rupees <<amount in words>> only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this <<date>>.

The conditions of this obligation are:

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

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

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

NOTWITHSTANDING ANYTHING CONTAINED HEREIN:

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

(Authorized Signatory of the Bank)

Seal:

Date:

10.4 PQ_2: Bidder Information Format

<<To be printed on Lead Bidder Company's Letterhead and signed by Authorized Signatory>>

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Subject: "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city".

Dear Sir,

Please find below details of lead bidder and other consortium members for participation in "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city" tender.

NOTE: To be filled for the lead bidder and consortium partner.

Bidder Information Sheet			
#	Particulars	Lead Bidder	Consortium Partner
1.	Name of the Organization		
2.	Type of Organization (Pvt. Ltd./Public Limited/LLP)		
3.	Country of Registered Office		
4.	Address of Registered Office		
5.	Company Registration Details		
6.	Date of Registration		
7.	Details of any Global Certifications (ISO/ITIL/CMMi etc.)		
8.	PAN/Equivalent		
9.	GST Registration Certificate		
10.	Address of Registered Office in India		
11.	No. of Years of Operation in India		
12.	Stake in Consortium (%)		
13.	Authorized Signatory Name		
14.	Authorized Signatory Designation		
15.	Authorized Signatory Contact Details		

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 6.

10.5 PQ_3: Power of Attorney for Lead Member of Consortium (In case of Consortium)

Whereas the VSCDL has invited applications from interested parties for the “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”.

Whereas _____ and _____
(Collectively “Consortium”) being Members of the Consortium are interested in bidding for the project in accordance with the terms and conditions of the Request for Proposal (RFP document) and other connected documents in respect of the Project, and

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, _____ having our registered office at _____,
M/s _____ having our registered office at _____, (hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate, nominate, constitute, appoint and 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 irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the concession/contract, during the execution of the project and in this regard, to do on our behalf 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 VSCDL, 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 VSCDL.

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 _____ DAY OF _____, 20____

For _____
(Signature)

(Name & Title)

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.*

10.6 PQ_4: Lead Bidder's and Consortium Partner's Turnover Details and Net Worth

<<To be printed on Lead Bidder Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Subject: "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city".

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city". I hereby declare that below are the financial details of our organization and consortium partner for last 5 financial years (FY 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19).

#	Details		FY 2014-15 (i)	FY 2015-16 (ii)	FY 2016-17 (iii)	FY 2017-18 (iv)	FY 2018-19 (v)	Average [(i)+(ii)+(iii)+(iv)+(v)/5]
			(in INR Crores)					
1.	Lead Bidder	Overall Annual Turnover						
		Turnover from Integrated ICT Project (# as defined in PQ)						
		Turnover from CAD implemented Business (## as defined in PQ)						
		Net Worth						

2.	Consortium Partner	Overall Annual Turnover						
		Turnover from Automatic Vehicle Tracking (# as defined in PQ)						
		Turnover from CAD implemented Business (## as defined in PQ)						
		Net Worth						

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

Details	Authorized Signatory	Secondary Contact
Name		
Title		
Company Address		
Mobile		
Fax		

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 6.

10.7 PQ_5: Experience of Automatic Vehicle Tracking

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”. I hereby declare that below are the details regarding relevant work that has been taken up by our company and consortium partner.

NOTE: To be filled separately for each project undertaken by the lead bidder and consortium partner.

Name of the Project	Lead Bidder				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
Mandatory Supporting Documents					
LoI/work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
Client certificate giving present status of the project and view of the quality of services by the bidder					

Name of the Project	Consortium Partner
---------------------	--------------------

	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Outcomes of the project					
Other Details					
Total cost of the project					
Total cost of the work done till date by the bidder (If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
Mandatory Supporting Documents					
LoI/work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
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 6.

10.8 PQ_6: Experience of Implementing CAD Software Projects

- <<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”. I hereby declare that below are the details regarding relevant work that has been taken up by our company and consortium partner.

NOTE: To be filled separately for each project undertaken by the lead bidder and consortium partner.

Name of the Project	Lead Bidder				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Outcomes of the project					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
Mandatory Supporting Documents					
LoI/work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
Client certificate giving present status of the project and view of the quality of services by the bidder					

Name of the Project	Consortium Partner				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Outcomes of the project					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
Mandatory Supporting Documents					
LoI/work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
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 6.

10.9 PQ_7: Self Declaration – No Blacklisting

<<To be printed on INR 100/- Stamp Paper>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

In response to the Tender Ref. No. _____ dated _____ for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”, as an Owner/Partner/Director of _____, 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 State/ Central Government/PSU.

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 State/Central Government/PSU 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.

Yours sincerely,

Signature of Authorized Signatory (with official seal)

Name :
Designation :
Address :
Date :
Place :
Seal of the Organization :

**10.10 PQ_8: Self Declaration – Bidder Not Terminated, Not Being Insolvent
or In Receivership or Bankrupt**

<<To be printed on INR 100/- Stamp Paper>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

In response to the Tender Ref. No. _____ dated _____ for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”, as an Owner/Partner/Director of _____, I/We hereby declare that presently our Company/Firm _____:

- a. has not been terminated by any Government/Semi-Government or Public Authority or Public Institution in India or abroad, before the completion of respective Contract period for which it has executed the project or in process of execution of such project, on account of its poor performance, delay or abandonment of work by it
- b. is not insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not be declared defaulter by any financial institution, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons
- c. not has, and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings
- d. does not have a conflict of interest in the procurement in question as specified in the RFP

11. Annexure II: Formats for Technical Bid

11.1 General Instructions for Preparation of the Technical Proposal

- i. Bidders have to submit a very structured and organized technical bid, which will be analysed by the Technical Evaluation Committee for different compliances with regards to the requirements of the project. The document submitted must be searchable and well indexed without any handwritten material. Since the cut-off marks for Technical bid Score is 70, 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.
- ii. Bidder is expected to divide its bid in following sections/documents:

a. Bidder's Competence to Execute the Project

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

- Financial capability of the bidder in required formats and supporting documents
- Experience of executing similar projects

b. Technical Proposal

The technical proposal should specify the following:

- Understanding of the project
- Clear articulation and description of the design and technical solution and various components including (infrastructure architecture, application architecture, data architecture and physical street layer architecture)
- Details of the application software proposed
- Integration approach with existing infrastructure
- Reasoning for selection of the proposed technology over other options
- Strength of the bidder to provide services including examples or case-studies of similar solutions deployed for other clients
- Clearly articulate the strategy and approach & methodology for design, installation, configuration and maintenance of project components, data recovery and hosting infrastructure of the project.
- 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.
- Detailed Project Plan with timelines, resource allocation, milestones etc. for supply, installation and commissioning of the various project components.
- The Operations and Risk Mitigation plan.

c. Other Details

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

#	Name of Item	OEM/ Make	Exact Model	Part No.	Quantity/ License Count Offered
1.	<Item 1>				
2.	<Item 2>				
3.	<Item 3>				
4.	<Item 4>				

- Make and Model (one & only one unique Make and Model per BOQ item is required) of all IT as well as Non-IT components along with datasheets highlighting Technical Specification (Ref: Volume 2) parameters in each datasheet for compliances.
- Compliance to Technical and Functional specifications as mentioned in Volume 2 against each specification feature.
- CVs of the Key Manpower proposed (Qualification of each resource is provided in Volume 2).

d. OEM Details

- OEMs of all proposed equipment/components should have existence in India for last two years as on 31 March 2019.
- During the PoC/Pilot/Demonstration at technical evaluation stage, the Technical Committee will give special attention to verify the quality, robustness and appropriateness of the proposed equipment/components for city conditions. If any brand/product is found unsuitable, bidder may get disqualified or may be asked to replace the product with better brands meeting the tender requirements. Without any cost implication or change s in commercial bid.

e. Proposed Team for the Project

- As specified in Technical Bid Evaluation Framework, VMC would give importance to the right people proposed for the project. Bidder may propose different people for different skill-sets required and different responsibilities (during project implementation and post-implementation). Following documentation is expected in this section:
 - (a) Overall project team (for both Implementation and Post Implementation support phases)
 - (b) Escalation chart for the entire project duration
 - (c) Summary table providing qualification, experiences, certifications and other relevant details
 - (d) Detail CVs in the format attached
- All above mentioned documents shall have an index page with page numbers specified for all the key information/headers on company's cover letter.
- During the demo at technical evaluation stage, the Technical Committee will give special attention to verify the quality, robustness and appropriateness of the proposed equipment/components for city

11.2 Documents Checklist for Technical Bid

#	Documents to be submitted	Submitted (Y / N)	(Page No.)
1.	Bidder competence related docs (Form TQ_1)		
2.	Details of projects executed (Form TQ_2 and TQ_3)		
3.	Understanding of the project		
4.	Description of the design and technical solution and various components including (infrastructure architecture, application architecture, data architecture and physical street layer architecture)		
5.	Details of the application software proposed		
6.	Integration approach with existing infrastructure		
7.	Reasoning for selection of the proposed technology over other options		
8.	Strength of the bidder to provide services including examples or case-studies of similar solutions deployed for other clients		
9.	Approach and methodology for design, installation, configuration and maintenance of hosted components, data recovery, hosting infrastructure of the project		
10.	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.		
11.	Detailed project plan with timelines, resource allocation, milestones etc. for supply, installation and commissioning of the various project components		
12.	Internet bandwidth requirement for the operations		
13.	Risk mitigation plan		
14.	Technically qualified full-time professionals (Form TQ_4)		
15.	Manpower deployed on the project (Form TQ_5)		
16.	CVs of the manpower proposed (Form TQ_6)		
17.	Make and model of all IT as well as Non-IT components		
18.	Compliance to Technical & Functional specifications as mentioned		
19.	Bill of material without prices		
20.	Datasheets highlighting the Technical specification parameters in each datasheet for compliances		
21.	Authorization letter from OEMs (Form TQ_7)		

11.3 TQ_1: Lead Bidder's and Consortium Partner's Turnover Details and Net Worth

<<To be printed on Lead Bidder Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Subject: "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city".

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city". I hereby declare that below are the details regarding Overall Annual Turnover and Net Worth of our organization and consortium partner for last 3 financial years (FY 2016-17, 2017-18 and 2018-19).

#	Details		FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Average
			(i)	(ii)	(iii)	(iv)	(v)	[(i)+(ii)+(iii)+(iv)+(v)/5]
					(in INR Crores)			
3.	Lead Bidder	Overall Annual Turnover						
		Turnover from GPS implemented Business (# as defined in PQ)						
		Turnover from CAD Software Business (## as defined in PQ)						
		Net Worth						
4.	Consortium Partner	Overall Annual Turnover						

	Turnover from GPS implemented Business (# as defined in PQ)						
	Turnover from CAD Software Business (## as defined in PQ)						
	Net Worth						

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

Details	Authorized Signatory	Secondary Contact
Name		
Title		
Company Address		
Mobile		
Fax		

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 7.22.

11.4 TQ_2: Experience of Implementing Automatic Vehicle Tracking

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”. I hereby declare that below are the details regarding relevant work that has been taken up by our company and consortium partner.

NOTE: To be filled separately for each project undertaken by the lead bidder and consortium partner.

Name of the Project	Lead Bidder				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
Mandatory Supporting Documents					
Work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
Client certificate giving present status of the project and view of the quality of services by the bidder					

Name of the Project	Consortium Partner				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Outcomes of the project					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
Mandatory Supporting Documents					
Work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
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 7.22.

11.5 TQ_3: Experience of Implementing CAD Software Business

- <<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”. I hereby declare that below are the details regarding relevant work that has been taken up by our company and consortium partner.

NOTE: To be filled separately for each project undertaken by the lead bidder and consortium partner.

Name of the Project	Lead Bidder				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Outcomes of the project					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
Mandatory Supporting Documents					
Work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
Client certificate giving present status of the project and view of the quality of services by the bidder					

Name of the Project	Consortium Partner				
	Project 1	Project 2	Project 3	-	Project 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					
Technologies used					
Outcomes of the project					
Other Details					
Total cost of the project					
(If project is executed as a consortium member, then provide cost of work done as per scope of work allocation only)					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
Mandatory Supporting Documents					
Work order with full BoQ					
Contract agreement					
Copy of invoice submitted to the client					
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 7.22.

11.6 TQ_4: Undertaking for Technically Qualified Full-time Professionals on Company's Payroll

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”. I hereby declare that my company <company's name> has <number > technically qualified professionals as on 31 March 2017.

NOTE: To be filled for the lead bidder and consortium partner.

#	Name of the Resource	Proposed Role	Highest Qualification	Total Experience (in years)	Total Relevant Experience for the Proposed Position (in Years)	Certifications
1.						
2.						
3.						

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 7.22.

11.7 TQ_5: Undertaking for Manpower Deployed on Project

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city”. I hereby declare that following resources are being proposed for the project.

NOTE: To be filled separately by the lead bidder and consortium partner.

#	Proposed Position	Resource Name	Proposed CV Compliance
1.	Project Manager		
2.	Control Room and Process Analyst (Operations Manager)		
3.	Planning and Scheduling Expert		
4.	Control Centre Controllers		
5.	Hardware, Network & Data Centre Staff Member (System Administrator)		

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 7.22.

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.

Yours sincerely,

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Date :

Place :
Seal of the Organization :

11.8 TQ_6: CVs of the Manpower Proposed

- <<CV of the proposed Manpower to be submitted in the following format>>

1.	Name of the Staff																			
2.	Current Designation in the Organization																			
3.	Proposed Role in the Project																			
4.	Proposed Responsibilities in the Project																			
5.	Date of Birth																			
6.	Education	<table border="1"> <thead> <tr> <th>Degree/Diploma</th> <th>College/University</th> <th>Year of Passing</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </tbody> </table>			Degree/Diploma	College/University	Year of Passing													
Degree/Diploma	College/University	Year of Passing																		
7.	Key Training and Certifications																			
8.	Language Proficiency	<table border="1"> <thead> <tr> <th>Language</th> <th>Reading</th> <th>Writing</th> <th>Speaking</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </tbody> </table>			Language	Reading	Writing	Speaking												
Language	Reading	Writing	Speaking																	
9.	Employment Record (For the Total Relevant Experience)	<table border="1"> <thead> <tr> <th>From /To</th> <th>Employer</th> <th>Position Held</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </tbody> </table>			From /To	Employer	Position Held													
From /To	Employer	Position Held																		
10.	Total No. of Years of Work Experience																			
11.	Total No. of Years of Experience for the Role Proposed																			

12. Highlights of Relevant Assignments Handled and Significant Accomplishments	Use following format for each project	
	Name of Assignment/Project:	
	Year:	
	Location:	
	Client:	
	Main Project Features:	
	Positions Held:	
	Activities Performed:	

11.9 TQ_7: Format for Authorization Letters from OEMs

<<To be printed on OEM's Letterhead and signed by Authorized Signatory of OEM>>

Date: DD/MM/YYYY

To,

CEO, Vadodara Smart City Development Limited (VSCDL)

Subject: "Selection of implementing Agency for ICT upgradation of Fire stations and ICT enabled fire services in Vadodara city" – Authorization Letter from OEMs.

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

Dear Sir,

We _____, (name and address of the manufacturer) who are established and reputed manufacturers of _____ having factories at _____ (addresses of manufacturing/development locations) do hereby authorize M/s _____ (name and address of the bidder) to bid, negotiate and conclude the contract with you against the above mentioned tender for the above equipment/software manufactured/developed by us.

We herewith certify that the above mentioned equipment/software products are not end of the life and we hereby undertake to support them for the duration of minimum 6 years from the date of this letter.

This authorisation letter shall be valid till the bid validity period defined in the volume 1 of the RFP.

Yours faithfully,

(Signature of the Authorized Signatory of OEM)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

(Signature of the Authorized Signatory of Lead Bidder)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

12. Annexure III: Commercial Bid Format and Instructions

12.1. General Instructions

1. Bidder should provide all prices as per the prescribed format under this Annexure.
2. All the prices are to be entered in Indian Rupees (INR) only.
3. Prices indicated in the schedules shall be inclusive of all taxes, duties and levies etc. The prices should also specify five year support cost as per provided formats.
4. It is mandatory to provide breakup of all taxes, duties and levies wherever asked for.
5. VSCDL reserves the right to ask the successful bidder to submit proof of payment against any of the taxes, duties and levies indicated.
6. VSCDL shall take into account all taxes, duties and levies for the purpose of evaluation.
7. The bidders need to account for all Out of Pocket expenses due to boarding, lodging and other related items.
8. Variation in quantities of individual items shall be permitted. The successful bidder shall not object to the upward or downward variation in quantities of any item within the variation limits. Please refer Section 7.28 for more details.
9. 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 VSCDL/VMC. Bidder shall ensure that the future products supplied are of latest specifications as per the OEM roadmap.
10. For the purpose of evaluation of Commercial Bids, VSCDL 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.
11. VSCDL 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 VSCDL.
12. SI should refer Volume II of the Tender for details on the functional requirements of the system and the benchmark specifications for the items mentioned in the Commercial Formats.
13. No escalations of prices will be considered under any circumstances.
14. The software licenses provided should be perpetual and at enterprise level such that VSCDL or VMC (or any entity as determined by VSCDL) can use the software products irrespective of number of users and number of field devices or number of cores of computer. Additions to users or field devices or number of cores will have to be done at no additional cost.

12.2. Commercial Bid Cover Letter

Date: dd/mm/yyyy

To

The Chief Executive Officer

Vadodara Smart City Development Ltd.

Vadodara, Gujarat - 390001

Sub : Selection of Implementation Agency for the Project "_____ **for VSCDL**"

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

Dear Sir,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of "_____ **for VSCDL**" do hereby propose to provide services as specified in the bid referred above.

1. PRICE AND VALIDITY

- All the prices mentioned in our bid are in accordance with the terms as specified in the bid documents. All the prices and other terms and conditions of this bid are valid for a period of 180 calendar days from the date of opening of the Bids.
- We hereby confirm that our bid prices include all taxes. Taxes are quoted separately under relevant sections, as specified in the bid formats.
- We have studied the clause relating to Indian Income Tax and hereby declare that if any income tax, surcharge on Income Tax, Professional and any other Corporate Tax in altered under the law, we shall pay the same.

2. UNIT RATES

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

3. DEVIATIONS

We declare that all the services shall be performed strictly in accordance with the bid documents and there are no deviations.

4. QUALIFYING DATA

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

5. BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in the bid document. These prices are indicated in the subsequent sub-sections of this Section.

6. CONTRACT PERFORMANCE GUARANTEE BOND

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance Bank Guarantee in the form prescribed in the bid.

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

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

Thanking you,

Yours faithfully,

(Signature of the Authorised Signatory)

Name

Designation

Seal.

Date:

Place:

Business Address:

12.3. Commercial Bid Format and Instructions

The Bidder has to quote the rate in the BoQ Spreadsheet available online with this bid. Details to be filled up for price bid are as below. VSCDL reserves the right to change the BOQ, if required. All bidders have to quote for all the fields of commercial format in the e-tendering site. Further, Bidders should submit the break- up of the costs as per reference tables in hardcopy format within two working days from the date of opening of the Commercial Packet with tax breakup and HSN code. The fees shall be inclusive of all taxes and charges as applicable under the relevant Laws of India. Should there be a change in applicable taxes, the actual taxes on the date of billing would prevail.

If the overall price bid for L1 bidder exceeds more than 10% of the estimated tender cost specified in relevant Section, then VSCDL may consider scrapping this bid process and invite bid again with same or revised tender documents

12.4. Schedule S: Summary of Cost Estimate

Summary of Estimates for VMC Project				
I. Capital Expense				
Sr.	Item Description	Reference Schedule	Total Price Exc. Tax	Total Price Inc. Tax
1	Fire Detection and Monitoring Equipment with Installation	Schedule A		
2	Fire Tender Equipment	Schedule B		
3	Application Development and Configuration	Schedule C		
4	Fire Audit Compliance	Schedule D		
5	Training	Schedule E		
6	DC Infrastructure	Schedule F		
Total (in INR)				
Total (in Words)				

I. Operational Expense												
Sr.	Item Description	Reference Schedule	Total 1st Year Rate Exc. Tax(IN NR)	Total 1st Year Rate Inc. Tax(IN NR)	Total 2nd Year Rate Exc. Tax(IN NR)	Total 2nd Year Rate Inc. Tax(IN NR)	Total 3rd Year Rate Exc. Tax(IN NR)	Total 3rd Year Rate Inc. Tax(IN NR)	Total 4th Year Rate Exc. Tax(IN NR)	Total 4th Year Rate Inc. Tax(IN NR)	Total 5th Year Rate Exc. Tax(IN NR)	Total 5th Year Rate Inc. Tax(IN NR)
1	AMC	Schedule G										
2	Communication Cost	Schedule H										
3	Manpower Cost	Schedule I										
Total for 5 Years (in INR)												
Total for 5 Years (in Words)												

12.5. Schedule A: Fire Detection and Monitoring Equipment with Installation

Schedule A: Fire Detection and Monitoring Equipment with Installation							
Sr.	Item Description		QTY	Units (Z)	Unit Rate (Y) (Without Taxes) (INR)	Applicable Taxes (W) (INR)	Total Rate (V=Z*(W+Y)) (INR)
1	Wireless Central Station	Addressable Monitoring	1	Nos.			

2	Wireless Addressable Local Monitoring Station	6	Nos.			
3	L2 Switch for Fire Station	6	Nos.			
4	Water Level Equipment for Monitoring Water Level of River	10	Nos			
5	Water Level sensor for Fire Tenders	30	Nos			
6	POS Machine for Water Tankers	20	Nos			
7	Any Other Item	1	Lump-Sum			

^Please provide complete details of item/work with make, model, quantity, duration, resources etc.

Total – Schedule A (in INR)

Total (in Words)

12.6. Schedule B: Fire Tender and Other Vehicle Equipment

Schedule B: Fire Tender and Other Vehicle Equipment						
Sr.	Item Description	Quantity	Units (Z)	Unit Rate (Y) (Without Taxes) (INR)	Applicable Taxes (W) (INR)	Total Rate (V=Z*(W+Y)) (INR)
1	Mobile Data Terminal for Fire Tenders	30	Nos.			
2	Mobile NVR	30	Nos.			
3	Fix Mini dome Camera for Fire Tender	60	Nos.			
4	3G/4G Router in Fire Tender	30	Nos.			
5	GPS Device for Vehicles	60	Nos.			
6	Any Other Item	1	Lump-sum			
^ Please provide complete details of item/work with make, model, quantity, duration, resources etc.						
Total – Schedule B (in INR)						
Total (in Words)						

12.7. Schedule C: Application Development and Configuration

Schedule D: Application Development and Configuration						
Sr.	Item Description	Quantity	Units (Z)	Unit Rate (Y) (Without Taxes) (INR)	Applicable Taxes (W) (INR)	Total Rate (V=Z*(W+Y)) (INR)
1	Enterprise wide License for VTMS solution (Rent/Purchase)	1	Lump-sum			

2	Computer Aided Call takers and Dispatch Software	6	Nos.			
3	Integration with IBM IOC	1	Lump-sum			
4	Integration with Helpdesk	1	Lump-sum			
5	Integration with Call Management Software	1	Lump-sum			
6	Any other Item	1	Lump-sum			
^ Please provide complete details of item/work with make, model, quantity, duration, resources etc.						
Total – Schedule C (in INR)						
Total (in Words)						

12.8. Schedule D: IT and Fire Audit compliance before Go Live

Schedule E: Fire Audit compliance before Go Live							
Sr.	Item Description	QTY	Units (Z)	Unit Rate (Y) (Without Taxes) (INR)	Applicable Taxes (W) (INR)	Total (V=W+Y) (INR)	Rate
1	Third Party IT and Fire Preparedness Audit for the City	1	Lump-sum				
2	Any other Item	1	Lump-sum				
Total – Schedule D (in INR)							
Total (in Words)							

12.9. Schedule E: Training

Schedule E: Training							
Sr.	Item Description	QTY	Units (Z)	Unit Rate (Y) (Without Taxes) (INR)	Applicable Taxes (W) (INR)	Total Rate (V=W+Y) (INR)	
1	Training	12	Batches				
2	Any other Item	1	Lump-sum				
Total – Schedule E (in INR)							
Total (in Words)							

12.10. Schedule F: DC Infrastructure

Schedule F: DC Infrastructure							
Sr.	Item Description	Quantity	Units (Z)	Unit Rate (Y) (Without Taxes) (INR)	Applicable Taxes (W) (INR)	Total Rate (V=W+Y) (INR)	
1	Rack Server	4	Nos.				
2	TOR Switch	2	Nos.				
3	Firewall	2	Nos.				
4	SAN Storage	1	Nos.				
5	Structured Cabling	1	Nos.				
6	Smart Rack	1	Nos. Nos.				
7	Any Other Item	1	Lump-sum				
^Please provide complete details of item/work with make, model, quantity, duration, resources etc.							
Total – Schedule F (in INR)							
Total (in Words)							

12.11. Schedule G: AMC

Schedule G: AMC							
Sr.	Item Description	Qty.	Units (Z)	Total 4th Year Rate (Without Tax)	Total 4th Year Rate (With Tax)	Total 5th Year Rate (With out Tax)	Total 5th Year Rate (With Tax)
1	AMC for Devices in Schedule A, Schedule B, Schedule C and Schedule F	1	Lump-sum				
2	Any other item	1	Lump-sum				
Note: As all the field devices will be in warranty for first three years, AMC would be applicable for 4 th and 5 th year only and will be paid Yearly in O&M Phase							
Total – Schedule G (in INR)							
Total (in Words)							

12.12. Schedule H: Communication Cost

Schedule H: Communication Per Year													
Sr .	Item Description	Qty.	Units (Z)	Total 1st Year Rate (With out Tax)	Total 1st Year Rate (With out Tax)	Total 2nd Year Rate (With out Tax)	Total 2nd Year Rate (With out Tax)	Total 3rd Year Rate (With out Tax)	Total 3rd Year Rate (With out Tax)	Total 4th Year Rate (With out Tax)	Total 4th Year Rate (With out Tax)	Total 5th Year Rate (With out Tax)	Total 5th Year Rate (With out Tax)

						Ta x)				Ta x)			
1	Sim Card Monthly Charges (For Textual Data) year 1	60	Lum p- sum										
2	Sim Card Monthly Charges (For Textual Data) year 2	60	Lum p- sum										
3	Sim Card Monthly Charges (For Textual Data) year 3	60	Lum p- sum										
4	Sim Card Monthly Charges (For Textual Data) year 4	60	Lum p- sum										
5	Sim Card Monthly Charges (For Textual Data) year 5	60	Lum p- sum										
6	Sim Card Monthly Charges (For Cameras) year 1	30	Lum p- sum										
7	Sim Card Monthly Charges (For Cameras) year 2	30	Lum p- sum										
8	Sim Card Monthly Charges (For Cameras) year 3	30	Lum p- sum										
9	Sim Card Monthly Charges (For Cameras) year 4	30	Lum p- sum										
10	Sim Card Monthly Charges (For Cameras) year 5	30	Lum p- sum										
11	Any Other Item	1	Lum p- sum										

^Please provide complete details of item/work with make, model, quantity, duration, resources, etc.

Total – Schedule H (in INR)													
Total (in Words)													

12.13. Schedule I: Manpower

Schedule I: Manpower Per Year													
Sr .	Item Description	Qty.	Units (Z)	Total 1st Year Rate (Without Tax)	Total 1st Year Rate (With Tax)	Total 2nd Year Rate (Without Tax)	Total 2nd Year Rate (With Tax)	Total 3rd Year Rate (Without Tax)	Total 3rd Year Rate (With Tax)	Total 4th Year Rate (Without Tax)	Total 4th Year Rate (With Tax)	Total 5th Year Rate (Without Tax)	Total 5th Year Rate (With Tax)
1	Project Manager year 1	1	Lump-sum										
2	Project Manager year 2	1	Lump-sum										
3	Project Manager year 3	1	Lump-sum										
4	Project Manager year 4	1	Lump-sum										

5	Project Manager year 5	1	Lump sum											
6	Field Support Engineer year 1	2	Lump sum											
7	Field Support Engineer year 2	2	Lump sum											
8	Field Support Engineer year 3	2	Lump sum											
9	Field Support Engineer year 4	2	Lump sum											
10	Field Support Engineer year 5	2	Lump sum											
11	Any Other Item	1	Lump sum											
^Please provide complete details of item/work with make, model, quantity, duration, resources, etc.														
Total – Schedule I (in INR)														
Total (in Words)														

The rates mentioned above will be considered as final bid price by bidder for commercial evaluation. The rates quoted must be inclusive of any out of pocket and any other incidental expenses.

Note:

1. The bidders may visit the site and obtain additional information at their own cost and responsibility.
2. All the prices are to be entered in Indian Rupees ONLY.
3. The Bidder needs to account for all Out of Pocket expenses due to Boarding, Lodging and other related items.
4. Prices indicated in the schedules shall be inclusive of all taxes, Levies, duties etc. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for. During the payment stage, VSCDL reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
5. For the purpose of evaluation of Commercial Bids, VSCDL 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.
6. The Contract Price shall be a firm lump sum not subject to any alteration.

7. The implementation agency shall be deemed to have satisfied itself as to the correctness and sufficiency of the contract price, which shall, except as otherwise provided for in the contract, cover all its obligations under the contract.
8. VSCDL would communicate the Commercial Ranking of all qualified bidders after carrying out adjustments to the rates / prices quoted by the bidder on e-tendering system by applying weight-age as detailed in the bid document. The results declared through the e-tendering system of VSCDL after opening of the commercial bids do not include adjustments and hence do not necessarily reflect commercial ranking of bidders and hence shall be treated as void.
9. VSCDL can utilise the man-month based functional onsite support based on the requirements of legal department. The payments will be as per actual consumption of resources.
10. VSCDL can utilise the man-month based manpower support for change request based on the requirements of legal department. The payments will be as per actual consumption of resources.
11. The schedule of quantities indicates nearest approximate quantities of the items works. There is a possibility of upward or downward variation of quantities due to site modifications. Any variation of quantities of the individual items as per schedule and overall cost variation of 25% shall be accepted by contractor without any financial implication. If variation is beyond above stipulated limits, such items shall be carried out after written mutual agreement. However no excess payment claims for additional quantities shall be entertained if variation is established prior to deliveries of stipulated quantities.
12. Contractor shall take exact measurements for items like cables, earth strips prior to bringing and cutting the same. The contractor shall bear the cost for quantities of items like cables, earthing strips, trays specific measurement. VSCDL will not take over excess quantities of any items is specifically agreed. Contractor shall have to take back all such quantities without any financial burden to VSCDL.

13. Annexure IV: Master Service Agreement

13.1 Master Service Agreement

<<To be printed on INR 100/- Stamp Paper>>

This **AGREEMENT** is made at _____, Vadodara, Gujarat, on this ____ day of _____, _____, BETWEEN

-----, hereinafter referred to as "**Client**", or "**VSCDL**" (*which expression unless repugnant to the context therein shall include its administrator and permitted assignees*) of the **FIRST PART**;

AND

-----, a company registered under the Companies Act, 1956, having its registered office at ---
-----, hereinafter referred to as "**Systems Integrator**" or "**SI**" or "**Vendor**", (*which expression unless repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees*), of the **SECOND PART**.

Whereas VSCDL has envisaged to implement ICT enabled Fire Stations and ICT upgradation of Fire Stations and ICT enabled fire services in Vadodara city

And whereas VSCDL published the RFP to seek services of a reputed IT firm as a System Integrator for Design, Development, Implementation and Maintenance of ICT IN VADODARA CITY

And whereas M/s. ----- has submitted its proposal for "**Selection of Implementation Agency ICT enabled Fire Stations and ICT upgradation of Fire Stations and ICT enabled fire services in Vadodara city**";

AND whereas VSCDL has selected M/s. as successful bidder and issued Letter of Intent dated to the successful bidder who in turn signed and returned the same as a token of acceptance of Letter of Intent.

And whereas VSCDL 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:

1. Definitions

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

- (a) "VSCDL" means VSCDL;
- (b) "Contract" means this Agreement entered into between VSCDL and the Systems Integrator including all attachments and annexure thereto and all documents incorporated by reference therein;
- (c) "Systems Integrator" means M/s. ----- interchangeably referred to as "SI" in the contract; and
- (d) "RFP" means the Tender Published by VSCDL (Ref. No. -----) and the subsequent Corrigenda/ Clarifications issued.
- (e) "Go Live or successful completion of implementation of the project" date means the 16th day after the date on which the proposed project stream becomes operational after successful conclusion of all acceptance tests to the satisfaction of VSCDL.

- (f) "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.
- (g) "Assets" refer to all the hardware / software / furniture / data / documentation / manuals / catalogues / brochures / or any other material procured, created or utilised by the SI for the Vadodara City 'FIRE' Project.

2. Interpretation

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

3. Term of the Agreement

The term of this agreement shall constitute implementation phase and a period of 5 years from the date of Go-Live of all project components.

In the event of implementation period getting extended beyond implementation timelines, for reasons not attributable to the Systems Integrator, VSCDL 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.)

VSCDL 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 VSCDL and finalized in mutual discussion with the SI.

4. Work Completion Timelines and Payment Terms

Project delivery/work completion milestones and payment milestones shall be as per Section 9 of Volume 1, . Milestones shall be from the date of work order.

5. Scope Extension

VSCDL reserves right to extend the scope of services for the price and timelines, as per terms and condition of the RFP as given in RFP, in accordance with the change management procedure as given in Annexure of this volume after a notice to the successful bidder. The SLAs applicable to this Contract shall be liable for the additional items too..

6. Service Level Agreement (SLA)

VSCDL is looking at a very professional approach in the project implementation and its operations. System Integrator is expected to match these expectations of the service levels given in Annexure III of this agreement. Any non-adherence to the SLAs would lead to the penalty, to be calculated as per the details given in Annexure III to this agreement.

7. Use and Acquisition of Assets during the Term

System Integrator shall:

- Take all reasonable and 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/catalogues/brochures/or any other material procured, created or utilized by the SI or the VSCDL for the Vadodara Fire Revamap Project in proportion to their use and 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 VSCDL 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 and 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 and 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 and 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 and 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 and in conformity with any statutory requirements from time to time applicable to them,
- Provide and facilitate access to VSCDL 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 and facility insurance & any other insurance for the Assets, data, software, etc. in the joint names of VSCDL & 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 VSCDL of this project in an efficient and speedy manner; &
- Obtain a sign off from VSCDL or its nominated agencies at each stage as is essential to close each of the above considerations.

Ownership of the Assets shall vest with VSCDL on Go Live of the project. Ownership of any asset, created during the contractual period after go Live, shall also vest with VSCDL upon creation of such asset. System Integrator shall not use VSCDL data to provide services for the benefit of any third party, as a service bureau or in any other manner. Six months prior to the expiry of the contract (of the respective work streams), there shall be joint inspection by a team of VSCDL and SI to assess the damages to the assets, if any. If damage to the assets is found unacceptable to the VSCDL, then corresponding penalty/liquidated damages shall be recovered from SI from the fees payable.

8. Security and Safety

- The System Integrator will comply with the directions issued from time to time by VSCDL 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 VSCDL Project's information technology security and standard policies in force from time to time as applicable.
- System Integrator shall use reasonable endeavours 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 VSCDL's data, facilities or Confidential Information.
- The System Integrator shall upon reasonable request by VSCDL 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 VSCDL 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 VSCDL's Facilities.

9. Indemnity

The System Integrator agrees to indemnify and hold harmless VSCDL, 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

- i. Any misstatement or any breach of any representation or warranty made by the System Integrator or
- ii. 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, or the SLAs (I) infringes a copyright, trade mark, trade design enforceable in India, (II) infringes a patent issued in India, or (III) constitutes misappropriation or unlawful disclosure or use of another Party's trade secrets 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 VSCDL, or
- iii. any compensation / claim or proceeding by any third party against VSCDL arising out of any act, deed or omission by the System Integrator or
- iv. 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.
- v. Any payment made under this Agreement to an indemnity or claim for breach of any provision of this Agreement shall include applicable taxes.

10. Third Party Claims

- a. Subject to Sub-clause (b) below, the System Integrator (the "Indemnified Party") agrees to Indemnify and hold harmless VSCDL, its officers, employees and agents, from and against all losses, claims litigation and damages on account of bodily injury, death or damage to tangible personal property arising in favour

or any person, corporation or other entity (including the Indemnified Party) attributable to the Indemnifying Party's performance or non-performance under this Agreement or the SLAs.

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

- i. The Indemnified Party, as promptly as practicable, informs the Indemnifying Party in writing of the claim or proceedings and provides all relevant evidence, documentary or otherwise;
- ii. The Indemnified Party shall, at the cost and expenses of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the defence of such claim including reasonable access to all relevant information, documentation and personnel. The indemnifying party shall bear cost and expenses and fees of the Attorney on behalf of the Indemnified Party in the litigation, claim.
- iii. If the Indemnifying Party does not assume full control over the defence of a claim as provided in this Article, the Indemnifying Party may participate in such defence 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 and hold indemnified the VSCDL 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; and (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 & defences 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, and on the invocation of the Performance Bank Guarantee, the Indemnifying Party shall be subrogated to all rights & defences of the Indemnified Party with respect to the claims to which such indemnification relates.

11. Publicity

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

12. Warranties

- a. The System Integrator warrants and represents to VSCDL that:
 - i. It has full capacity and authority and all necessary approvals to enter into and to perform its obligations under this Agreement;
 - ii. This Agreement is executed by a duly authorized representative of the System Integrator;
 - iii. It shall discharge its obligations under this Agreement with due skill, care and diligence so as to comply with the service level agreement.
- b. In the case of the SLAs, the System Integrator warrants and represents to VSCDL, 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 fulfilment of the obligations of the System Integrator as provided for in sub clause (a) and (b) above, in the event that such warranties cannot be enforced by VSCDL, the System Integrator will enforce such warranties on behalf of VSCDL and pass on to VSCDL, 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, and has failed to cure such default within thirty days from the occurrence of such default, VSCDL will have the option to invoke the Performance Guarantee after serving a written notice of thirty (30) days on the system Integrator.

13. Force Majeure and Vandalism

In the event that any damages to items due to vandalism (physical Majeure attack by public, tampering of equipment by VSCDL/VMC staff or traffic police 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 warranty period and maintenance period shall be the liability of VSCDL. In such case, VSCDL shall request the System Integrator (SI) to repair/replace the damaged unit and reinstall the same. All costs towards the same shall be reimbursed by VSCDL to the System Integrator 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 and 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 VSCDL in writing of such conditions and the cause thereof within 7 calendar days of the Force Majeure event arising. VSCDL, or the consultant / committee appointed by the VSCDL shall study the submission of the SI and inform whether the situation can be qualified one of Force Majeure. Unless otherwise directed by the VSCDL 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, VSCDL and the SI shall hold consultations with each other in an endeavour to find a solution to the problem.

Notwithstanding anything to the contrary mentioned above, the decision of the VSCDL shall be final and binding on the SI.

14. Resolution of Disputes

VSCDL 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, VSCDL and the SI are unable to resolve amicably such dispute, the matter shall be referred to a Tribunal of three (3) Arbitrators, constituted as per the terms of and under the (Indian) Arbitration and Conciliation Act, 1996. Each party to the contract shall appoint/ nominate one Arbitrator each, the two Arbitrators so appointed/ nominated by the VMC and the SI herein shall together choose the third Arbitrator, who shall be the Presiding Arbitrator of the Tribunal. The consortium of the three Arbitrators shall form the Arbitral Tribunal. Proceedings under this clause shall be subject to applicable law of the Arbitration and Reconciliation Act, 1996 and the venue of such arbitration shall be Vadodara. Cost of arbitration shall be borne by each party proportionately. However, expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself. The provisions of this clause shall survive termination of this Agreement.

15. Limitation of Liability towards VSCDL

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 VSCDL 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 VSCDL 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, SI's cumulative liability for all its obligations under the contract shall not exceed the value of the charges payable by VSCDL within the remaining duration of the contract term from the day claim is raised.

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.

16. 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 VSCDL 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, I shall hold VSCDL's interest paramount, without any consideration for future work, and strictly avoid conflict of interest with other assignments.

17. Data Ownership

All the data created as the part of the project shall be owned by VSCDL. 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 VSCDL. VSCDL / its authorized representative(s) shall conduct periodic / surprise security reviews and audits, to ensure the compliance by the SI vendor to data / system security.

18. Intellectual Property Rights

- (A) For the customized solution developed for the project, IPR of the solution would belong exclusively to the VSCDL. The SI shall transfer the source code to VSCDL at the stage of successful implementation of the respective smart element. SI shall also submit all the necessary instructions for incorporating any modification / changes in the software and its compilation into executable / installable product. VSCDL 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 VSCDL for the same.
- (B) Deliverables provided to VSCDL 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 VSCDL, immediately upon creation, vest in VSCDL. To the extent that the System Integrator Proprietary Information is incorporated within the Deliverables, System Integrator and its employees engaged hereby grant to VSCDL 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 VSCDL.

19. Fraud and Corruption

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

- a. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of VSCDL in contract executions.
- b. "Fraudulent practice" means a misrepresentation of facts, in order to influence a procurement process or the execution of a contract, to VSCDL, 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 VSCDL of the benefits of free and open competition.
- c. "Unfair trade practices" means supply of services different from what is ordered on, or change in the Scope of Work which is given by the VSCDL in Volume II.

- d. “Coercive Practices” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of contract.

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

20. Exit Management

(i) Exit Management Purpose

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

The exit management period starts, in case of expiry of contract, at least 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 VSCDL or Six months after the beginning of the exit management period, whichever is earlier.

(ii) Confidential Information, Security and Data

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

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

(iii) Employees

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

(iv) 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 VSCDL and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / Software / Active / passive), documentations, manuals, catalogues, archive data, Live data, policy documents or any other material related to the FIRE Project.

(v) Exit Management Plan

Successful Bidder shall provide VSCDL 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) A detailed program of the transfer process that could be used in conjunction with a Replacement Vendor including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;
- b) Plans for the communication with such of the Successful Bidder, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer;
- c) Plans for provision of contingent support to the FIRE project and Replacement Vendor for a reasonable period (minimum one month) after transfer.
- d) Successful Bidder shall re-draft the Exit Management Plan annually to ensure that it is kept relevant and up to date.
- e) Each Exit Management Plan shall be presented by the Successful Bidder to and approved by VSCDL or its nominated agencies.
- f) 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.
- g) During the exit management period, the Successful Bidder shall use its best efforts to deliver the services.
- h) Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.

(vi) Transfer Cost

On premature termination of the contract for reasons other than those mentioned in Section _____ (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 to 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

21. Termination of Contract

VSCDL 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 / go-live 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.

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

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

Consequences of Termination

In the event of termination of this contract, VSCDL is entitled to impose any such obligations of the SI in relation to the requirement of the contract 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 VSCDL 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 VSCDL 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 VSCDL.

22. 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 VSCDL, 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 its Personnel make public the recommendations formulated in the course of, or as a result of the Project.

- a. The System Integrator recognizes that during the term of this Agreement, sensitive data will be procured and made available to it, its sub-contractors & agents, and others working for or under the SI. Disclosure or usage of the data by any such recipient may constitute a breach of law applicable causing harm not only to VSCDL/VMC whose data is used but also to its stakeholders. The SI, its sub-contractors & agents are required to demonstrate utmost care, sensitivity and strict confidentiality. Any breach of this Article will result in VSCDL and its nominees receiving a right to seek injunctive relief and damages from the SI.
- 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") and
 - 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 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 and 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 and 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 and 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 or, in respect of the SLAs, the termination or expiry of the SLAs. 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 and 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 and that VSCDL & 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 VSCDL Project. In order for such reviews to be frank and candid, for the greatest benefit to both VSCDL & 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 VSCDL 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.

A Non-disclosure agreement shall be signed separately between the Systems Integrator and VSCDL.

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 as prevalent in the country. The SI shall also conform to the standards laid down by VSCDL/VMC/Government of Gujarat/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/outsourcing would be allowed only for work like

- Passive Networking and Civil Work during implementation
- FMS staff for non- IT support during post-implementation
- Services of professional architect for design of command / viewing centres
- 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 VSCDL for sub-contracting any allowed work as mentioned in clause, if not already specified in the proposal and approved by VSCDL. 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* VSCDL 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 VSCDL 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 Labour 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 *Labour* 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.

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

VSCDL:

CEO, VSCDL

Systems Integrator:

 Tel: _____
 Fax: _____

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

i) Performance Guarantee

The SI shall submit two unconditional and irrevocable Performances Bank Guarantee(s) (PBGs) from a list of approved banks; One PBG for the implementation phase valid for 2 years, and one PBG for operations phase for 5 years from go-live. The implementation phase PBG will be 10% of Capex and operations phase PBG will be 10% of Opex. The performance guarantee 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 VSCDL 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, and under no circumstances will such personnel be considered as employees of VSCDL. 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 VSCDL 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, and that, such personnel have appropriate qualifications to perform the Services. VSCDL 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 VSCDL 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 VSCDL or its nominated agencies, within not later than 30 working days. System Integrator shall depute quality team for the project & as per requirements, VSCDL 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 and 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' and the System Integrator shall not remove such personnel without the prior written consent of VSCDL. For any

changes to the proposed resources, System Integrator shall provide equivalent or better resources (in terms of qualification & experience) in consultation with VSCDL.

- 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. VSCDL shall have the right to review and 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 and shall be liable for the acts & omissions of its employees & agents in connection therewith.

k) Variations and Further Assurance

- a. No amendment, variation or other change to this Agreement or the SLAs shall be valid unless made in writing and 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 and 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 and 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 and 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 and all schedules appended thereto & the contents & specifications of the Volumes I & II, of the RFP subsequent corrigenda issued thereon & clarification (undertakings) accepted by the VSCDL 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 or 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.

- p)** Deliverables will be deemed to be accepted by VSCDL if no communication from the department is made to the SI after 30 days of delivery, provided the delivery is made to the designated officer and clearly highlighted in at least 3 weekly project progress reports

23. 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 Vadodara courts only.

IN WITNESS whereof the parties hereto have signed this on the day, month and year first herein above written.

Signed, sealed and delivered

By _____

_____,

For and on behalf of the ***Governor of the
State of Gujarat***

Signed, sealed and delivered

By _____

For and on behalf of the “Systems Integrator”,

Witnesses:

(1)

(2)

Attachments to the Agreement:

- 1) Scope of Services for the Systems Integrator (Annexure I)
- 2) Detail Commercial proposal of the Systems Integrator accepted by VSCDL (Annexure II)
- 3) SLA to be adhered by the Systems Integrator (Annexure III)
- 4) Corrigendum Document published by VSCDL subsequent to the RFP for this work (Annexure IV)
- 5) RFP Document of VSCDL for this work (Annexure V)
- 6) LoI issued by the VSCDL to the successful bidder (Annexure VI)
- 7) The successful bidder’s “Technical Proposal” and “Commercial Proposal” submitted in response to the RFP (Annexure VII)

14. Annexure V: List of Products/Solutions which require MAF and OEMs

14.1. List of Products/Solutions Which Requires MAF from OEMs

The bidder/lead bidder shall submit Manufacturers Authorization Certificate (MAF) from Original Equipment Manufacturers (OEMs) of the following products/solutions:

Sr.	Product	MAF Submitted (Yes/No)	Proof (of OEM's Existence in India) Submitted (Yes/No)
1.	Mobile Data Terminal		
2.	Mobile NVR		
3.	CAD Software		
4.	GPS Devices		
5.	Switches and Router		
6.	Fix Mini Dome Camera		
7.	Water Level sensor for Fire Tenders		
8.	POS Machine for Water Tankers		

15. Annexure VI: Change Management Procedure & CCN

15.1. Change Management Procedure

1. This applies to and describes the procedure to be followed in the event of any proposed change to contract, site Implementation, Operation, and Service levels. Such change shall include, but shall not be limited to, changes in the scope of services provided by SI and changes to the terms of payment.
2. The SI agrees that the requirements given in the Bidding Documents are minimum requirements and are only indicative. The SI shall prepare the detailed requirement at the time of preparing the design document prior to actual implementation. It shall be the responsibility of the SI to meet all the requirements of technical specifications contained in the RFP; and any upward revisions and/or additions of quantities (unless quantities are specified in RFP for exact and finite requirements), specifications sizes given in the Bidding Documents required to be made during execution of the works, shall not constitute a change order and shall be carried out without a change order and shall be carried out without any time and cost effect to VSCDL.
3. Further upward revisions and or additions required to make SI's selected equipment and installation procedures to meet Bidding Documents requirements expressed and to make entire facilities safe, operable and as per specified codes and standards shall not constitute a change order and shall be carried out without any time and cost effect to VSCDL.
4. Any upward revision and/or additions consequent to errors, omissions, ambiguities, discrepancies in the Bidding Documents which the SI had not brought out to the VSCDL's notice in his bid shall not constitute a change order and such upward revisions and/or addition shall be carried out by SI without any time and cost effect to VSCDL.
5. Change requests in respect of the contract, the site implementation, or the Service levels shall emanate from the Parties' representative who shall be responsible for obtaining approval for the change and who shall act as its sponsor throughout the Change Control Process and shall complete Part A of the CCN. CCNs shall be presented to the other Party's representative who shall acknowledge receipt by signature of the authorized representative of the Authority.
6. SI and the Authority while preparing the CCN, shall consider the change in the context of whether the change is beyond the scope of Services (considering clauses above) including ancillary and concomitant services required. The CCN shall be applicable for the items which are beyond the stated/implied scope of work as per the RFP document.
7. SI shall assess the CCN and complete Part B of the CCN. In completing Part B of the CCN SI shall provide as a minimum:
 - a. a description of the change;
 - b. a list of deliverables required for implementing the change;
 - c. a timetable for implementation;
 - d. an estimate of any proposed change;
 - e. any relevant acceptance criteria;
 - f. an assessment of the value of the proposed change;
 - g. Material evidence to prove that the proposed change is not already covered within the scope of the RFP, Agreement and Service Levels.
8. Prior to submission of the completed CCN to the Authority or its nominated agencies, SI shall undertake its own internal review of the proposal and obtain all necessary internal approvals. As a part of this internal review process, SI shall consider the materiality of the proposed change in the context of the Agreement, the sites, Service levels affected by the change and the total effect that may arise from implementation of the change.
9. Each Party shall be responsible for its own costs incurred in the quotation, preparation of CCNs and in the completion of its obligations described in this process, provided SI meets the obligations as set in the CCN. In the event SI is unable to meet the obligations as defined in the

CCN then the cost of getting it done by third party shall be borne by SI. Change requests and CCNs shall be reported monthly to each Party's representative who shall prioritize and review progress.

15.2. Change Order

- a. The Change Order will be initiated only in case (i) the VSCDL directs in writing the SI to include any addition to the scope of work covered under this Contract or delete any part of the scope of the work under the Contract, (ii) SI requests to delete any part of the work which will not adversely affect the operational capabilities of the facilities and if the deletions proposed are agreed to by the VSCDL and for which cost and time benefits shall be passed on to the VSCDL, (iii) the VSCDL directs in writing the SI to incorporate changes or additions to the technical specifications already covered in the Contract.
- b. Any changes required by the VSCDL over and above the minimum requirements given in the specifications and drawings etc. included in the Bidding Documents before giving its approval to detailed design or Engineering requirements for complying with technical specifications and changes required to ensure systems compatibility and reliability for safe operation (As per codes, standards and recommended practices referred in the Bidding Documents) and trouble free operation shall not be construed to be change in the Scope of work under the Contract.
- c. Any change order as stated herein comprising an alteration which involves change in the cost of the works (which sort of alteration is hereinafter called a "Variation") shall be the Subject of an amendment to the Contract by way of an increase or decrease in the schedule of Contract Prices and adjustment of the implementation schedule if any.
- d. If parties agree that the Contract does not contain applicable rates or that the said rates are inappropriate or the said rates are not precisely applicable to the variation in question, then the parties shall negotiate a revision of the Contract Price which shall represent the change in cost of the works caused by the Variations. Any change order shall be duly approved by the VSCDL in writing.
- e. Within ten (10) working days of receiving the comments from the VSCDL or the drawings, specification, purchase requisitions and other documents submitted by the SI for approval, the SI shall respond in writing, which item(s) of the Comments is/are potential changes(s) in the Scope of work of the RFP document covered in the Contract and shall advise a date by which change order (if applicable) will be submitted to the VSCDL.
- f. Any integrations with future systems at VSCDL (not listed as a part of current scope) will be done through the change management process. The SI will have to quote man month efforts for each of the integration components and the same will be vetted by VSCDL or its appointed project management consultants/third party.

15.3. Format of Change Control Note (CCN)

Change Control Note	CCN Number:
Part A: Initiation	
Title	
Originator	
Sponsor	
Date of Initiation	
Details of Proposed Change	
(To include reason for change and appropriate details/specifications. Identify any attachments as A1, A2, and A3 etc.)	
Authorized by Authority	Date
Name	
Signature	
Received by the Bidder	Date
Name	
Signature	
Change	
Change Control Note	CCN Number:
Part B: Evaluation	
(Identify any attachments as B1, B2, and B3 etc.)	
Changes to Services, payment terms, payment profile, documentation, training, service levels and component working arrangements and any other contractual issue.	
Brief Description of Solution:	
Deliverables:	
Timetable:	
Charges for Implementation:	
Other Relevant Information: (including value-added and acceptance criteria)	
Authorized by Authority	Date
Name	
Signature	
Change Control Note	CCN Number:
Part C: Authority to Proceed	
Implementation of this CCN as submitted in Part A, in accordance with Part B is: (tick as appropriate)	
Approved	
Rejected	
Requires Further Information (as follows, or as Attachment 1 etc.)	

For Authority and its nominated agencies	For SI
Signature	Signature
Name	Name
Title	Title
Date	Date

16. Annexure VII: List of Locations

This annexure gives the locations which are to be covered as part of Scope of Work for this project:

16.1. Fire Stations

Fire office and Stations	
#	
1	Administrative Office, AksharChowk, Atladara
2	Dandia Bazar Fire Station + Control Room
3	Wadiwadi Fire Station
4	Panigate Fire Station
5	G.I.D.C. Fire Station
6	Gajarawadi Fire Station
7	TP-13, Chhani Fire Station
8	ERC - Darjipura Fire Station

17. Annexure VIII: Software Functional Requirements

The system software shall be designed primarily for the monitoring of fire alarm systems installed at the local station and central station. The system shall provide the user with a means to view the entire covered area or campus enabling rapid recognition and identification of source and extent of each event, particularly during multiple alarm conditions. The presentation of alarm information shall be provided in graphical format.

17.1 Computer Aided Dispatch

SI No	Requirement	Minimum Requirement Description
1	All Communication Channel / Multiagency support	The CAD software should be capable to receive call (Mobile, Landline),SMS, chat, email, social media like Facebook, Twitter, panic button and mobile apps to create an appropriate case and send the relevant case to the Dispatch Officer after case assessment. The software should have capability to support multiple agencies like Police-100, Fire-101, and Medical-108 and others. The software should be able to integrate the calls for Service from this multi-agencies into the same system and prioritization should be possible
2	Communication Channel- Call	The software should be able to display caller name, caller number and caller address on Call taker desktop. Data from LBS: Automatic display of data on CAD screen Manual Data of the location: Call taker should be capable to enter the location of the caller on CAD Screen
3	Communication Channel-SMS	The software should be able to automatically create a case using SMS data (PhoneNo.&Message)and display on the Call taker desktop
4	Communication Channel-SMS	The Call taker should be able to assess the SMS case and send the case to Outbound call Call taker Or Dispatch Officer after assessment
5	Communication Channel-IOT	The software should be able to receive the data from Internet of things (IOT) devices like sensors, panic button with location of the user & display on the officer desktop

6	Communication Channel-IOT	The officer should be able to send the case to the Outbound dialer Or Dispatch Officer after assessment
7	Communication Channel - Mobile Application	The CAD software should be integrated with Mobile Apps of Vadodara SmartCity (VSCDL) to receive location of the caller and caller number
8	Call Classification	The Call taker should be able to classify the case into distress case, enquiry case, departmental case, administrative, crankcase, outbound call case etc. All such Classifications must be logged in the system and can add more classification at later stage. System will facilitate the Call Taker (CT) to classify and transfer the call to available CT and DO. It should have facility to transfer calls based on regional languages and dialects of Gujarat state. This will ease the communication with users calling from different geo region of the city.
9	Call Transfer Or Call Forward	CAD Call taker should be capable to transfer the call to the control room call taker in other city Or in other district. Call should not be disconnected during call forwarding Or Transferring into the system
10	Duplicate Calls	An incident may attract more than one call but each call is important as it may give details about eye witnesses and other supportive evidence. The system should suggest the possibility of a duplicate call based on the location, time, classification etc. Duplicate calls should be cross referenced for easily retrievable through Grouping
11	Duplicate Calls	It should be possible to merge duplicate calls depending upon the situation. To achieve this, the system should have the capability for cross referencing of Case. Whenever a call is merged, the system should not generate a new dispatch
12	Duplicate Calls	The software should alert the communication Call taker, Dispatch Officer, Supervisor etc. or about the possibility of a single incident - Duplicate call situation

13	Voice Recorder	Integration with Voice recording software provided by Bidder
14	Case Creation	System should facilitate Case creation, by providing' a drop down menu for various functions like creation of an Case, files attachment, location of nearby Case and other information related to an Case should be recorded and updated.
15	Soft Phone Integration	The software should have a capability of aTelephone window allowing Call takers to dial, answer, end a call, keep the call in busy status, and free a specific call. The functionality should also provide the status of incoming and outgoing calls. Soft phone should have a feature to select the state for call forwarding Or transferring Or conference call.
16	Emergency Call	The software should have capabilities to create Hot Calls like fire in a building, disaster emergency. The Call taker should fill minimum information for a Hot call. Dispatch Officer and Supervisor should receive the alert Or notification for the same. Dispatch Officer should be able to initiate action for quick response.To facilitate quick response to emergency calls Or hotcall, there should be special and dedicated hot call button in the Call taker software
17	Case Status Display and Search	The Call taker GUI screen must be provided with 'Case Status Window' displaying the status of all Case like 'Pending', 'Open', 'Dispatched', 'Closed' etc. The software should be able to search the Cases using various search option. Like Case status, Case ID, phone no, Date & Time, over the time, Case Type etc.
18	Archive Search	The Call taker should be able to search the archive records from the system
19	Location of Incident	Once a Location of the incident is marked in the map, The Call taker shall have the facility to see for various 'Location of Interest(LOI)' in the vicinity of a case location like nearest Hospital, Blood Bank, Fire brigades. (Applicable in Dispatch Officer module also).

20	Display of Fire Station Name	The software should have the facility in the system to populate within it, the relevant, Fire stations/ Fire Tenders (Fire brigades), whenever a new case is created to save precious time ineffective response to a distress call
21	Update Existing Cases	The software should allow the Call taker to update Or modify existing case details for any additional or supplementary information related to the same. Also there should be provision to attach relevant files like pdf, Word etc. to the event, for ensuring an effective response
22	Alert Notification	Software should have capability to alert a Call taker or supervisor if a case is not attended in pre-defined time duration.
23	Pre-Defined Q&A	A freely configurable structured query script should be available within the software to assist the Call taker with pre-defined Q&A to ask for during the call, SMS response and web response. Based on the Case and Case subtype, the response for Call taker should be prompted
24	User Defined Alarm	The application should be configured with user-defined alarm modules that will be flashed on all the other screens in case of major incident, for ex. Terrorist attack.
25	Case Cancel or Close	The Case like rally should be expired automatically by the system once the time defined for the Case gets over or software should have a provision that supervisor can close Or Cancel Or postponed the Case manually into the system
26	Call Back	Call taker should be able to call back the caller with the click of the mouse.
27	Call Address Conflict Handling	It should be possible to find the numbers whose subscriber information and caller information recorded by the Call taker are different and generate a report for the concerned agency.

28	Case Acknowledgement	System should be capable to send an SMS to the caller stating the Case Number, acknowledgment, brief text of the complaint and caller or non-Caller can verify the status through email Or SMS to Non-Emergency helpline
29	Incident Scheduling and Mapping	Incident-scheduling functionality should be available in proposed software for future Cases like, VIP Visit, Rally, Festival etc. The software shall have provisions of setting the date and time for the particular Case, automatic Case should be generated on that date
30	Incident Scheduling and Mapping	The Scheduled Case feature should allow operators to create, edit, delete, and search for a scheduled Case.
31	Language Support	It should be possible to switch between Gujarati and Hindi languages. Software should have support for Gujarati, Hindi language. Display and input both functionality of given languages should be provided in the application.
32	General Requirements	The system should support the use of primary incident type and a sub incident type to narrow down certain generic incidents. For example, a primary incident type could be "Fire", sub incident type could be "Commercial", "Residential" etc.
33	Call Conference	Call taker should be able to do conference call with Call takers in same centre or other Dial 112 centre Or Other dialled number by the Call taker.
34	Other Call taker Status For Call Conference Or Forward Call	Call taker should be able to see the Call takers status (like busy Or Free) with Call taker extension and forward Or transfer Or conference call with the caller
35	Transfer Call	Call taker should be able to transfer the call to the dispatch Officer who is sitting at District Control room to further assessment in emergency case
36	Outbound Call	Call taker should be able to see any type of call like Missed call Or Drop Call Case and can call back from the application

37	Outbound Call	Call taker should be able to dial the international number in case of international caller is in distress and contact to the proposed system
38	General Requirement	CAD Should have a capability to merge or split the case if the cases are of same type or different however it all depends on the situation
39	Standard Operating Procedures	The software should have capabilities to set the Standard Operating Procedures(SOP)for Call takers. The same needs to be invoked during Case creation by the Call taker. It should also be possible to remodel the Case, Case sub types, priorities and type of service required by using a remodelling tool.
40	Location Storage History and Optimization	The software should store Or update the location history of the caller in CAD database. This history should be gradually increased and optimized in the system as per requirement
41	Physically Challenged Citizen	The CAD software should have a capability to categorise the citizen during the case analysis where the citizen is physically challenged such as Blind, Dumb, deaf and allocate the case to appropriate. These situations should be assessed by the Call Taker and then transferred to the most suitable Call Taker.
42	Fire Tender Dispatch to Incident Sites	The Software should suggest the fire tenders closest to the location of incident. The dispatcher shall choose which unit(s) to dispatch and it should be possible to do so with drag-and-drop ease
43	Dispatching	The Case, once classified and detailed by the communication Call taker, shall be passed by the system to Dispatch Officer screen with the call of the user
44	Case Information	The software should display all the information entered by the Call taker for a case. It should display the location as identified by the CO on the map. The Dispatch Officer should also have the option of relocating the case

45	Dispatch Decision	The software should suggest fire tender for dispatch based on a pre-defined algorithm. The conditions could include jurisdiction, proximity, specialization, on duties resources etc. The Dispatch Officer shall choose which fire tenders to dispatch and it should be possible to do so with a click of a button.
46	MDT Notification	The Dispatch Officer should be able to send all the details of the incident to the MDT device, wherein the official in the fire tender is able to view the complete details of the call as a “Common Operating Picture” for the Call Taker/Dispatcher and the MDT staff. The DO can also SMS, send push notification into MDT CAD application. Dispatch Officer should be able to call the fire tender person through driver in case of emergency also The Dispatch Officer should be able to send SMS to the nearest fire station supervisor and broadcast the same to multiple receivers if required
47	Case Status by fire tender	The Dispatch Officer should be able to enter the status of the case as reported by the Responding fire tender as an option, if the MDT cannot update the status directly
48	Call Taking and Dispatching	Upon discovering that a call is of an emergency nature, the Call taker should be able to alert the Dispatch Officer and other official users. They should begin dispatching as the call proceeds. Therefore, the case form should be displayed on the Dispatch console as it is being populated by the Call taker and updated
49	Fire Tender Tracking and Status Update	The CAD Integrated GIS map should display the assigned, unassigned fire tenders using appropriate and intuitive graphical symbols. The Dispatch Officer can command an assigned fire tenders to proceed to the case location through defined media or through dispatching the case information.

50	Fire Tender Tracking and Status Update	The software should be capable of displaying the fire tenders on the GIS map with colour coding according to their current status. Fire tender icon colour should change automatically with their change in status i.e., dispatch, end-route, at scene, available etc. The entire movement of a fire tender from being assigned to a case till arrival upon scene should be time stamped and monitored by the Dispatch Officer. Appropriate alerts should be generated when an fire tender does not send its GPS location for a defined (changeable dynamically)time.
51	Case Update	The software should have the capabilities to record all case related information changes Or updating made after the creation of case by the same or different Call takers, Dispatch Officers, Supervisors.
52	Fire Tender Playback	Proposed software should have the tools to provide the playback of the fire tender movement data, displayed on the integrated GIS Map. The map should be an integral part of the CAD itself.
53	Alarm for New Case	The software shall provide an alarm or alert for every new case entered in the system
54	Audio Visual Indication	The Software should provide with an indicator to indicate that a case has exceeded the predetermined time in its current status still the closure
55	Case Status	There should be facility for case symbolization. To facilitate easy identification of case status (pending & open),cases should be displayed on map with different colours
56	Shortest Path Indication	There should be provision for shortest route to guide fire tenders in the MDT Application. In case the MDT map does not show the same details to the driver in the fire tender then the Dispatch Officer can find from the GIS based map the shortest path from the dispatched fire tender to the case location and convey the shortest path direction to the dispatched fire tender. The shortest path feature allows user to identify the shortest path or route between the source and destination.

57	Display of Cases and Resources on Map	There should be provision for display of field resources and open/pending cases on map
58	Recording of all Fire Tender movements on map	There should be provision for recording of all fire tender movements on map-date wise, fire tender wise.
59	Reviewing	The software should facilitate viewing of cases and fire tenders chronology
60	General Requirement	The Dispatch Officer should be able to dispatch the incidents to the Mobile Data Terminal fitted in the fire tenders over 3G/4G/5G(not limited to) and use SMS as a fallback mode per requirement & SOP definition
61	Interoperability	Software should be capable of swapping between Dispatch Officer Supervisor based on the User authentication, without the need to have separate licenses in each category
62	Standard Operating Procedures(SOP)	The software should have the capabilities to set the Standard Operating Procedures (SOP's) for Dispatch Officer. The same needs to be invoked during creation of case or dispatch the fire tenders.
63	Case Attachments	The software should have a provision to attach any file to a case. The file could be an image, video, audio etc.
64	Case Attachments	When the case is listed in the case list there should be an indication that a case has a file attachment. The indication can be any icon for attachment. All case attachments should be stored in the CAD database for easier backup
65	General Requirements	A Dispatch Officer has the ability to create an incident for a fire tender per a fire tender's request based on the fire tender's observation of an activity (on view field case) And The supervisory officers/identified officers at fire stations should have permission to override the dispatch requirement as assessed at first level of contact. Respective officials can take decisions on fire tender dispatch in case of contingencies and extraordinary situations

66	General Requirement	A Dispatch Officer has the ability to dispatch multiple number of fire tenders on an incident or non-incident activity
67	General Requirement	The originating Dispatch Officer will receive a notification when the stacked case has been worked by someone else. A timer can be configured to notify the Dispatch Officer who originally stacked the call that the partial case has not been completed
68	Configuration & Creation of CAD Master Data base	The software or a separate interface should create Or configure various master database as follows but not limited to the databases. The list may increase based on solution requirement and functional specification 1. Users & Roll creation of Call takers 2. Dispatch Zones Or Groups & Fire Stations 3. Fire tenders information 4. Cases & cases Sub-type 5. Shift Master 6. Skill Master 7. LOI Creation 8. Add Agencies 9. Schedule Report 10. Schedule Backup 11. Language setting and dictionary creation 12. Response Plan
69	General Requirement	Solution should have fully integrated GIS module and be able to identify the location of the caller (using LBS/SDR database/otherwise), fire tender location on preloaded map (GIS Maps) into Call taker desktop. It should have the capability and tools to view attribute details of any object. Mapping Tools to be provided to be able to group the multiple attribute layers and to control (ON and OFF) the same. The map should be part of the CAD Solution itself to enable efficient use of GIS.
70	General Requirement	There should be provision to display map from other sources in addition to the GIS map which is used in the system. Multiple maps should be supported on the same map view to enable the Call Taker for better functioning.
71	Desktop GIS	GIS maps will be pre-loaded into the Call taker desktops for faster performance and data will be rendered on the maps from the centre on real time

72	GIS Interface	GIS engine should be tightly integrated with the CAD software. The user should be able to draw a virtual fence on the map and determine points of interests that are within that fence .The POIs could be Hospitals, Health centres etc. The fence can be drawn as a polygon, rectangle or a circle. The user should be able to find closest POIs (Hospitals, Police Stations etc.) from a point identified on the map OR from an event location OR a MDT location
73	Realtime location of the fire tender	The Software should enable the Dispatch Officer to see the real time fire tender location on the integrated GIS Map. Dispatching tools should have the facility to track the fire tender on the said map.
74	Ability to track Fire Tender in dispatch mode	Tools must be provided to facilitate the Dispatch Officer to be able to monitor the assigned fire tender in various modes like – Dispatch mode, End-route mode, Arrive mode and Available mode. The entire movement of a fire tender from being assigned to any incident till arrival upon scene should be time stamped and monitored by the Dispatch Officer
75	GIS Functionality	Software should support at least the following GIS Functionality - a) MDT and GPS/AVLS interface- for fire tender tracking b) Scale- map should be displayed as per solution requirement and can be scalable further c) Route module-regular & frequent monitoring of any particular location. b) Event and address objects - for each type of call (for duplicate Or repetitive calls) and non-call case (in case of SMS, chat, email etc.)

76	Case location free draw	The software should support registering the Case locations not only in the form of point spots but also append the line or polygon area affected by the same. This is to handle situations wherein the affected Or reported points is an area e.g. accident on a road segment or riot in an area. The Dispatch Officer should be able to freely draw to record such locations in the system. So that the Dispatch Officers can easily setup the staging area locations
77	Hold case	The software should support holding the Case for availability of specific fire tender Or responding unit. Once the field unit is available it gets dispatched automatically to the specified Case
78	Support for mobile devices and applications	The Mobile Apps should support a latest OS like Windows, Android, IOS ,Linux etc.
79	SMS Delivery	SMS should be delivered by the system whenever a fire tender is allocated for dispatch. The message should be delivered to the fire tender mobile phone, Supervisor, Fire station Officer, Control Room Officer.
80	Notification	A Notification should be delivered by the system in the MDT CAD software whenever a fire tender is allocated for dispatch. The message should be delivered to the MDT, Supervisor, Fire station Officer etc. This should be a configurable workflow depending on the SOPs defined for each type of case
	Remote Viewer for Monitoring and Report Generation for Supervisor	
81	Event Monitoring	The software should facilitate supervision of Control Room operations. The Supervisor should be able to examine each event and ensure appropriate legal action is taken. The Call taker shall be able to call up the complainant to solicit feedback and satisfaction report. Supervisor should be able to issue instruction pertaining to an event while it is in progress

82	Dashboard	Supervisor should have a dashboard to monitor the activity of the Communication Call taker, Dispatch Officers
83	General Requirements	Status of all Call Takers and Dispatchers are updated in real time on the supervisor's screen. The status of each call and the assignment of resources are updated on the view of supervisor. Supervisor shall have all facilities of call taker and dispatcher. Supervisor should be able to issue instructions pertaining to a Case ID while it is in progress
84	General Requirements	Planning & Scheduling for VIP movements: There should be provision for Planning and Scheduling of Events and Resource Movements. Events can be pre-planned in case of any future incidents. Resources can be prescheduled for dispatching in case of VIP movements
85	Response Plan	The Supervisor software should be configure/ create the response plan based on Incident
86	GIS Map	The software should have integrated GIS map with Zoom In, Zoom Out, PAN functionalities. GIS map should display the current scale
87	Event Monitoring	The software should support active event monitoring with detail information and location& Id on the map
88	Reports	The software should have in built web based Reporting module which should be able to generate the reports as per the requirement of Emergency and Fire Services. The reporting module should have an ability to create various reports using various options like Date wise, Fire Station, Zone, event Type, Sub-Type etc.

89	Reports	The application should have a variety of reports (which includes but not limited to) following; 1. Call Details 2. Average Response Time 3. 4. Blank Calls, Crank Calls, Emergency Calls, Hot Calls, Information Calls 4. Call per hour 5. Fire Station wise Response time 6. Event Details, events Statistics 7. Events Sub Type 8. Fire Station / Fire Zone wise Report 9. Fire Tender activity, Daily activity summary, Dispatch response, stop 10. fire tender Status summary 11. Fire Tender Maintenance Summary 12. Fire Tender Response Time 13. Active event By event Types
90	Dashboards	There shall be dashboards for different supervisory levels to give them graphical picture of the performance of those within their jurisdictions. 1. Call Trend– Day, week and month 2. Average Response Time for call taking, dispatching and responding units. 3. By Event Type 4. By Fire stations and Fire stations 5. fire tender activity–Run Time and Halt Time 6. Case status (open, in progress, resolved, close, etc.)
91	Analysis	The reporting module should have an ability to create various GIS Analysis Reports. It should be possible to select the data on the basis of Zones, Fire Stations, events, event Sub-type, Priority & date and time.
92	Analysis	Incident Query ,Incident Count, Repeat Incident
93	Fire tender Dash Board	The reporting module should have inbuilt dashboard to view the performance and health check of GPS devices fitted in fire tenders
94	Tools for Analysis	There should be software tools for response analysis, mapping and hotspot analysis. It should be possible to select the data on the basis of jurisdictions, date and time of the day range and other data fields. It should be possible to create Thematic Maps like pin mapping, Incident count mapping and repeat Incident count Mapping. It should be possible to do detailed analysis at least the following ways – Hot Spot Analysis, Trend Analysis, Neighbourhood Analysis and Changeover Time Analysis

95	Configuration & Creation of CAD Master Data base	The application software should offer administration tool for optimum utilization of resources, master database creation and other analytical purposes. It shall enable the Systems Administrator to define users & configure their access privileges
96	Configuration & Creation of CAD Master Data base	The software should create /configure various master database like: Users & Roll creation of operators, Dispatch Zones / Groups & Fire Stations, fire tenders, events and event sub types, Shift Master, Skill Master, LOI Creation, Add Agencies, Schedule Report, Schedule Backup, Language setting and dictionary creation.
97	General Requirements	CAD Mobile application is to provide the Mobile Workforce with full access to the event data empowering them to make informed decisions while in the field. It will enable the mobile workforce to remain in communication with the command centre allowing event assignment information to be delivered to the devices as required
98	Display Dispatch Message	The Mobile Application Software should display all the Dispatch related transactions assigned to the respective units. All the event information as dispatched by the dispatcher must be captured and displayed.
99	Update Dispatch Status	On activating an assigned event by the mobile unit staff, the mobile application software should also display the Event & fire tender Status—i.e. dispatch, en-route, at scene, back to base and closed
100	Event Details	On activating an assigned event by the mobile unit staff, the mobile application software should also display event information – i.e. Event-id, Event-Type, Caller Phone Number, Caller Name, Caller Address, on browser and Event location on map window

101	MDT Software Interface	The system should have a provision for the MDT software to facilitate data communication link with the fire tender mounted location devices (GPS). The MDT software should provide tools to manage all data message communication, including real-time fire tender positioning information, between the Dispatch Console and the fire tenders
102	MDT Software Interface	The software must have facility to poll as specific GPS receiver of a fire tender to transmit its current positional information. The software should have capability of detecting fire tenders with speeding violations. In order to ensure the data security, the communication server software should be an integral part of the CAD software and not a 3rd party supply item.
103	Remote Supervisory Interface	The CAD Software should support Remote Supervisory functions and provide CAD and GIS view. It should be possible for the Senior Officials in, Fire Stations belonging to jurisdictions etc. to update the status of the incident. Comprehensive Dashboard, Logs should be available for Jurisdictions and other officials
104	Messaging and Communication Module	
105	Messaging	The CAD software should have an ability for messaging between Call takers (within control room and other state call centre)
106	Messaging	The Messaging module should allow the operator to attach files to the message. These files could be any relevant information like images, videos, documents etc.
107	Messaging	The software should allow a message to be sent as a broad cast to all logged in users including, communication Call taker, Dispatch Officers, supervisors and MDT users.
108	Other	

109	General Requirements	The application software should be capable of integrating with Telephony system including Communication Server / IPPBX, ACD and CTI interface. System shall be capable of retaining logs for a period of 3 months. System shall record radio communications; should have provision for integrating with radio system.
110	Other agencies or even senior Call takers can be informed with prefilled data about case via SMS	The software should have the provision to inform pre-defined case data to senior Call takers or other agencies
111	Accuracy	Dispatch Officer will be able to rate the accuracy of incident by CAD
112	Acknowledgement of fire tender	CAD should have a facility which will tell the Call taker about the fire tender that it has been reached to distress caller location or not.
113	General Requirements	The software should be able to schedule & automatically generate reports. Web based Report module should have the ability to produce reports with appropriate charts and graphs.
114	General Requirements	The report generation tool should have the facility to provide the report in both printed and electronic format
115	General Requirements	The application should have a variety of reports like: 1.Call Details 2.Event Details 3. Fleet Summary 4. Operator activity 5. fire tender activity, Daily activity summary, dispatch response 7. Active Event By Event Types 8. Efficiency of call takers speed of response, longest idle time, etc.9.Facility to generate the various graphical reports.
116	CAD Application for MDT	

117	General Requirements	MDT software is to provide the Mobile Workforce with full access to the assigned case with distress GIS Map location to empower them to make informed decisions while in the field.
118	General Requirements	MDT software will enable the mobile workforce to be in contact with Officer over the call, SMS, CAD Application notification etc.
119	Case Acknowledgement	The Dispatcher shall send cases data to the fire tender on its MDT and the fire tender staff shall initiate the response by accepting the Case on the MDT. The software shall be capable of delivering the acknowledgment to the CAD software for receipt of case information on the MDT device
120	Display Dispatch Messages	The Software should display all the Dispatch related transactions assigned to the respective fire tenders
121	Case Details	On activating an assigned Case by the fire tender staff, the Software should also display Case information—i.e. Case id, Case type, User Phone Number, User Name, User Address, into the Software and user location on map. The map should be provided by GIS Map Service provider
122	Update Dispatch Status	On activating an assigned case Or incident by the fire tender staff, Software should also display the user Or caller detail, location & fire tender Status like dispatch, end-route, at scene, back to base and closed. It should also enable the MDT users to report case closure
123	Communication	The MDT users should have the ability to provide information to the contact centre Officer Or dispatcher Or Supervisor through SMS messages and case closing reports
124	Updated GIS Maps	MDT GIS map should be for defined local area (such as Fire Stations stations etc.). And that updated data from central server can be refreshed into it remotely.
125	User Location	The software should have the capability to display real-time location of the User on the map and tracking of the user on map

126	(AVLS Software Interface)	The software should be capable to send the location of the fire tender in real time to the data centre
127	Action taken Report	It should also enable the MDT users to report Action Taken by attaching Audio Files, Image Files, Video Files and Text Entry. All Action Taken data should be available to Dispatcher and Supervisor through logs
128	Communication	The Software should support GPRS Message Or SMS Capabilities between the dispatch consoles and fire tender
129	Away User Status Updates	The Software should have functionality to update the Status like Available, Away, On Break, etc. of the Fire personnel
130	Offline Support	MDT user should be able to update the transaction as required in the application even in case of poor or no network connectivity. All the transaction should be stored in the MDT devices and can be sync once the devices is connected
131	Remote Software Updatons	The software should be capable to update Or upgrade the version of the software including GIS maps installed in the MDT remotely
132	OS Support	Mobile application should be available on latest versions of Android OS platform and be upgradable Or portable with latest updates in the application
133	Types and Subtypes	Application will also have list of fire causes like chemical, jungle fire, cylinder blast fire and call closure mechanism

17.2 Monitoring Application Features

The application should be capable of the following –

- a. Defining different zones as per Local Fire Stations.
- b. Mapping of images to zones defined.
- c. Linking zone images to the corresponding Fire Stations
- d. Configure the different detector types installed along with details such as number, type, location, last health check dates and results, last mock drill, etc. The details for each detector shall be further configurable within the system.
- e. Link detector with zone and corresponding images.
- f. Define different type of fire related incidents.
- g. Log events about data received from the detectors.
- h. Log incidents and record details of incident along with status which include
 1. Location of the incident,
 2. Type of fire incident,
 3. Timestamp when the call was logged,
 4. Timestamp when the first fire brigade unit turned out for dispatch.
 5. Timestamp for the dispatched unit to reach the location/plant where incident has occurred.
 6. Type, Sub-type and Timestamp of the message received from the dispatched unit to the headquarters
(For example –
 - i. “Stop” message is sent when no additional fire units are required to be dispatched and “Brigade Call” message is sent when additional units are required.
 - ii. In case of “Brigade Call” message, further sub-types of “Fire under Control” and “Stop” messages are applicable.
 - iii. A “All Clear” message is sent when the dispatched units are coming back to the station.

Note - Detailed codification and types of messages shall be provided by the Fire Department which the bidder has to implement in the system)
 7. Timestamp for the last dispatched unit to reach back to the fire station.
- i. User Maintenance Module to configure different types of users in the system.
- j. Maintain emergency contact details.
- k. Define various rules and maintain them.
- l. Initiate mock trials using fire simulation techniques.
- m. Generate customizable MIS reports with all the above attributes –
 1. Area wise report of incidents logged within a period (monthly/quarterly/yearly/custom)
 2. Type of incidents reported.
 3. Time taken to address incidents along with the type of incident and location.
 4. Export report data in standard formats (spreadsheet, printable document format, etc.)
 5. Capture the above reports with spatial details on the city base map with different legends.

17.3 Local Monitoring Station Features

The application should have the following features that are to be used at the Local Monitoring Station –

- a. GIS Integration with base maps from VSCDL that can have custom boundaries to be defined as per the area being monitored by the local station. A layer would have to be created with the following information captured on the geographic map of the area –
 - i. Source and Type of incident (Short Circuit/Inflammable/Hazardous/Trash/Vehicle, etc.) raised that helps the fire department pin-point to the actual location of disaster.
 - ii. Type of incident raised that helps the fire department pin-point to the actual location of disaster.
 - iii. Operational status of the fire detection system of all plant locations real-time within the boundary defined.

17.4 Central Monitoring Station Features

The application should have the following features that are to be used at the Central Monitoring Station –

- a. GIS Integration with base maps from VSCDL giving an aggregate view for the entire jurisdictional area of the city under VSCDL limits with boundaries defined as per area covered by the local monitoring stations. A layer would have to be created with the following information captured on the geographic map of the area –
 - i. Time call was logged to report the incident.
 - ii. Time for the nearest fire station to respond to the incident and arrive at the location of incident.
 - iii. Time taken by fire officers to put down fire.
- b. Provide real-time information giving visual and audible indication of the status of the complete solution, including all associated network nodes.
- c. The state of each network node, including alarms, troubles, supervisory conditions as well as the status of individual devices (such as analog values of intelligent smoke detectors) on the network shall be capable of being displayed at any time in a user-friendly clear and concise manner.
- d. Allow viewing, saving and/or printing of all installation event logs as needed without the need to be physically at the installation site.
- e. In addition to providing real-time remote access to the solution and its network nodes, an interface to provide and configure email notification based on various system/installation status changes. Status events such as alarms, pre-alarms, troubles, disables, etc. shall be capable of being sent via email and SMS to various designated email accounts based on time-of-day and day-of-week settings. Specific custom user text messages shall be configurable for any email and phone number, providing precise and accurate information immediately to critical personnel.

17.5 Integration with CCC Workstation and LED TV (Kept at Fire Control Room at CCC)

The Central Monitoring station application shall be operated from workstation of CCC project kept at Fire control Room located on first floor at CCC Building.

17.6 Integration with IBM IOC Solution of CCC Project

The Various application of this project shall be integrated with CCC software (IBM IOC) of Integrated City Command and Control Centre of VSCDL.

17.7 Integration with Helpdesk & Call management Solution of CCC Project

All the calls for the fire should be integrated with the helpdesk and call management solution of the CCC project of VSCDL

17.8 Integration with AVLS solution of ITMS Project

The GPS device used in this project should be integrated to the AVLS software solution of the ITMS Project of the VSCDL

17.9 Water Level Equipment on River Side

Sl. No	Requirement	Minimum Requirement Description
A	IOT Device	
1	Detection of Water Level at Sensitive Points	It should be able to detect the water level af rivers and lakes at sensitive points
2	Ultrasonic Sound based Detection	The system should be based on ultrasonic sound / sonar based detection of the Water Level.
3	Configurable Full Water Level	It should be possible to configure the full water level and danger levels
4	Power Management	The device should be able to work on AC Power 220-240V.
5	Robust Structure	The device should be installed over all weather robust structure. It should be installable either on Bridges, Culverts or Appropriate Locations along the bank of the river. The sensor and the processor should also be housed in a robust enclosure so that it doesn't get easily disturbed by weather conditions.
6	Communication Channels	The device should be able to communicate to the server over 3G/4G GSM Network.
7	Information to be Communicated	The device should detect the water level at the specific point and communicate the distance of the water level from the sensor.
8	Range of Detection	The maximum range of the sensor should be not lesser than 7 meters.

B	Monitoring Functionality	
1	Geo Tagging of Sensor Locations	The location of the Water Level Sensors should be geo-tagged and configured in the system
2	Configuration	Configuration of Alerts to be sent to different officers when the water level raises above danger level need to be configured along with the configuration of Danger Level Calculation.
3	Alerts and Notifications	When the Water Level crosses pre configured Full Level, Danger Level etc, the system should send SMS and Mobile App Alerts to Officers of the Department who need to attend to the situation
4	Configuration of Potential Areas under Threat	It should be possible in the system to mark different areas of the city that may be facing water logging for different levels of water at different sensor locations

18. Annexure IX: Technical Specifications for Detection Equipment's

18.1 Firewall for Smart DC

#	Item	Minimum Specifications
1.	Firewall Type	<ul style="list-style-type: none"> Next Generation Firewall
2.	Physical attributes	<ul style="list-style-type: none"> Should be mountable on 19" Rack Internal redundant hotswap power supply
3.	Interfaces	<ul style="list-style-type: none"> 4 x GE RJ45 4xGE SFP 1 RJ45 Console Port 1 USB Port 2x SFP SX Gigabit Transreceivers included 2 Management Ports, 2 GE RJ45
4.	Performance and Availability	<ul style="list-style-type: none"> Encrypted IPS throughput: minimum 5 Gbps NGFW Throughput 3.5 Gbps Concurrent sessions (TCP): 4 million Simultaneous VPN tunnels: 5000
5.	Protocols	<ul style="list-style-type: none"> TCP/IP RTP IPSec, DES/3DES/AES FTP, HTTP, HTTPS,SNMP, SMTP DHCP, DNS, Support for IP v4 & IPv6 IPSEC
6.	Other support	<ul style="list-style-type: none"> 802.1Q, NAT, PAT, IP Multicast support, Remote Access VPN, Time based Access control lists, URL Filtering, support VLAN, Radius/ TACACS, Support multilayer firewall protection, Traffic shaping, Bandwidth monitoring
7.	QoS	<ul style="list-style-type: none"> QoS features like traffic prioritisation, differentiated services, committed access rate. Should support for QoS features for defining the QoS policies.
8.	Management	<ul style="list-style-type: none"> Console, SSHv2, Browser based configuration SNMPv1, SNMPv2, SNMPv3
9.	Certifications	ICSA

18.2 Wireless Addressable Central Monitoring Station

S. No.	Parameter	Minimum Requirements
1	Monitor	<ul style="list-style-type: none"> • Video Wall: 2X2 LED • Dimensions: 32 inches • Resolution: 1366x768 WXGA • Brightness: 500 Cd/m2 or more • Contrast: 3000:1 • Overall Inter Screen Gap : Not more than 8 mm • Anti-glare front • White point: 10,000 K • Response time: 10 ms or less • 16.7 million colours • 24x7 operations • Viewing Angle: Better than 170° Horizontal & Vertical. • AC Input Voltage : 100-240 V AC ; 50-60 Hz • Input Capabilities : VGA/DVI , Component , S-Video , Composite
2	Wireless Communication	Multi-path redundancy with no single point of failure
3	Alarm Output	110db

18.3 Wireless Addressable Local Monitoring Station

S. No.	Parameter	Minimum Requirements
1	Monitor	<ul style="list-style-type: none"> • 2 LED Monitors • Dimensions: 32 inches • Resolution: 1366x768 WXGA or more • Brightness: 500 Cd/m2 or more • Contrast: 3000:1 • Overall Inter Screen Gap : Not more than 8 mm • Anti-glare front • White point: 10,000 K • Response time: 10 ms or less • 16.7 million colours • 24x7 operations • Viewing Angle: Better than 170° Horizontal & Vertical. • AC Input Voltage : 100-240 V AC ; 50-60 Hz • Input Capabilities : VGA/DVI , Component , S-Video , Composite
2	Wireless Communication	Multi-path redundancy with no single point of failure
3	Alarm Output	110db

18.4 L2 Switch for Fire Station

#	Parameter	Minimum Specifications
1	Ports	<ul style="list-style-type: none"> 24 or 48 (as per requirements) 10/100/1000 Base-TX ports and extra 2 or 4 nos of 1G Base SX/LX ports as per network solution offered. All ports can auto-negotiate between 10Mbps/ 100Mbps/ 1000Mbps, half-duplex or full duplex and flow control for half-duplex ports.
2	Switch type	Layer 2
3	MAC	8 K or more
4	Backplane	56 Gbps capacity (as per network configuration to meet performance requirements of wire speed switching for the connected devices)
5	Forwarding Rate	Packet Forwarding Rate should be 70.0 Mpps or better
5	Port Features	Must support Port Mirroring, Port Trunking and 802.3ad LACP Link Aggregation port trunks
6	Flow Control	Support IEEE 802.3x flow control for full-duplex mode ports.
7	Protocols	<ul style="list-style-type: none"> IPV4, IPV6 Support 802.1D, 802.1S, 802.1w, Rate limiting Support 802.1Q VLAN encapsulation, IGMP v1, v2 and v3 snooping 802.1p Priority Queues, port mirroring, DiffServ DHCP support Support upto 1024 VLANs
8	Access Control	<ul style="list-style-type: none"> Support port security Support 802.1x (Port based network access control). Support for MAC filtering. Should support TACACS+ and RADIUS authentication
9	VLAN	<ul style="list-style-type: none"> Support 802.1Q Tagged VLAN and port based VLANs and Private VLAN The switch must support dynamic VLAN Registration or equivalent Dynamic Trunking protocol or equivalent
10	Protocol and Traffic	<ul style="list-style-type: none"> Network Time Protocol or equivalent Simple Network Time Protocol support Switch should support traffic segmentation Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, TCP/UDP port number
11	Management	<ul style="list-style-type: none"> Switch needs to have console port for management via PC Must have support SNMP v1,v2 and v3 Should support 4 groups of RMON Should have accessibility using SSH, Console access, easier software upgrade through network using TFTP etc. <p>Configuration management through CLI, GUI based software utility and using web interface</p>

18.6 Water Level Equipment for Monitoring Water Level of River

Sr. No	Parameters	Minimum Required Specification
1	Water Gauge Type	To detect water level in River at a designated spot
2	Water Level Range	0 (base level) to designated “Flood’ Level
3	Linearity and Hysteresis	±0.1% FS
4	Accuracy	±0.1% FS at constant temperature
5	Warm Up Time	10 ms
6	Operating Temperature	0 to 55 degree C
7	Connecting Cable	Rugged Cable to carry Signal from sensors to GPRS Unit/Converter
8	GPRS Unit	To send Water Level output
9	Power Supply	AC Power Supply from utility company
10	Installation	On an existing civil structure (Column, Bridge etc) river side

18.7 Water Level Sensor with Router for Fire Tenders

Sr. No	Parameters	Minimum Required Specification
1	Water Gauge Type	To detect water level in fixed water tank of tanker vehicle (Fire Tender or Commercial water tanker
2	Water Level Range	0 to 7 feet of Water level
3	Linearity and Hysteresis	±0.1% FS
4	Accuracy	±0.1% FS at constant temperature
5	Warm Up Time	10 ms
6	Operating Temperature	0 to 55 degree C
7	Connecting Cable	Rugged Cable to carry Signal from level gauge to GPRS Unit
8	GPRS Unit	To send Water Level output
9	Power Supply	DC Operations (To connect to vehicle’s battery)

18.8 POS machine for Water tankers

Sr. No	Parameters	Minimum Required Specification
1	Processor	32 Bit multi-core microprocessor
2	Memory	128 MB Flash, 64 MB RAM

3	External Memory	Micro SD card
4	Display	3.5 Inch, 320X480 Color TFT Touch Screen
5	Magnetic Card reader	Triple Track, Bi-Directional
6	Card slots	Minimum 2 SAM Slots
7	Smart card reader	Contact Smartcard reader
8	Contactless card reader	EMV, ISO 14443 A/B, ISO 18092 NFC, Mifare Family and Felica
9	Printer	Printer 57mm, 100 mm per second
10	User Input	Minimum 15 keys Or Touchpad
11	Battery	Li-Polymer batteries, 2100 mAH
12	Communication	SIM Card (UTMS, GPRS) WIFI, Bluetooth & USB
13	Security	DES, 3DES/ T'DAS, AES, RSA, DUKPT
14	Environmental	0°C to 50°C operating temperature, 5% to 95% relative humidity non-condensing
15	Voltage	9 V DC (via AC Adapter)
16	Certification	EMV Certified Level 1 & 2
17	Accessories	Shoulder bag, AC Charger, Memory Card – 2GB, Extra Battery
18	API Support	The device should be programmed and integrated with VMC POS management system and the device transactions should be integrated into VMC POS portal on real time basis
19	Communication Ports	USB, Ethernet

18.9 Incidental Civil and Electrical work at sites

If any civil work and electrical work in the field related to scope of work, shall be carried out by bidder.

18.10 GPS Units for Fire Tenders and other vehicles

This shall be as per (Vehicle Location Tracking, AIS – 140 standards May, 2017 further amended as per amendment one (11 Dec, 2017). Please refer:

<http://morth.nic.in/index1.asp?lang=1&linkid=4&lid=56>

18.14 Mobile Data Terminal for Fire Tenders

#	Parameter	Minimum Specifications
---	-----------	------------------------

1.	Type	Android based Rugged In-Vehicle Mobile Data Terminal (Special-built)
2.	OS	Android 5.1 or higher
3.	Processor	Quad Core with GPU
4.	Display	7 inch WVGA(800×480) TFT-LCD Multi-touch capacitive touchscreen control
5.	Brightness	450 nits
6.	Contrast Ratio	500:1
7.	GPS	Built-in GPS module for positioning
8.	Cellular Interface	3G/4G for Data exchange via GPRS (SIM card also to be supplied)
9.	Interfaces	USB, OTG, Ethernet(POE)
10.	Camera	Built-in 0.3MP CMOS front camera
11.	Audio	Built-in Speaker, Internal Microphone
12.	Power Supply	DC In (from Vehicle electrical System)
13.	Battery	1 hour operation without external power
14.	Operating Temperature	0 to 60 degree C
15.	Mobile Data Usage	To receive and send data to Control Room via GPRS
16.	Mounting	Flexible mounting with VESA and on-dash bracket
17.	Ruggedness/Protection	IP64, MIL-STD-810F Method 516.6
18.	Certification	FCC, UL, CE

18.15 Mobile NVR for Fire Tenders

#	Minimum Specifications
1.	1 DIN Standard Size
2.	Shock Absorbent Design
3.	1 x 2.5 inch Hard disk (1 TB), 1 Memory card (128 Gb)
4.	Wifi module with 802.11 b/g/n , 2.4GHz
5.	4 Channel Realtime H.264 encoding, 25 fps
6.	Minimum 4 POE Ethernet interfaces
7.	Signals, Ethernet and USB Interfaces
8.	0 to 55 C working temperature

18.16 Fix Minidome Camera for Fire Tenders

#	Parameter	Minimum Specifications or better
1.	Video Compression	H.264
2.	Video Resolution	1920 X 1080, 2 MP
3.	Frame rate	Min. 25 fps

4.	Image Sensor	1/3" or 1/4 " Progressive Scan CMOS
5.	Lens	Internal 2.8mm-12mm HD Varifocal lens
6.	Minimum Illumination	Colour: 0.01 lux, (at 30 IRE)
7.	Day/Night Mode	IR-Cut Removable (ICR) Filter for Day/Night switching
8.	S/N Ratio	≥ 50 Db
9.	IR	30 meter IR
10.	Wide Dynamic Range	True WDR up to 100 db
11.	Audio	Full duplex, line in and line out, G.711, G.726
12.	Local storage	microSDXC memory card of 128 GB . In the event of failure of connectivity to the central server the camera shall record video locally on the SD card automatically. After the connectivity is restored these recordings shall be automatically merged with the server recording such that no manual intervention is required to transfer the SD card based recordings to server.
13.	Protocol	HTTP, HTTPS, FTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, ONVIF Profile S
14.	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption
15.	Intelligent Video	Motion Detection & Tampering alert
16.	Protection	IP66 and IK10
17.	Operating conditions	0 to 50°C
18.	Casing	IP66 and IK10 rated
19.	Certification	UL/EN, CE, FCC Certifications
20.	Power	802.3af PoE (Class 0) and 12VDC/24AC
21.	Location	2 per Fire Tender
22.	Cables	All cables and connectors must be hidden and not visible to passengers, crew etc.

18.12 3G/4G Router in Fire Tender

#	Parameter	Minimum Specifications
1	Type	Managed 3G/4G Branch Router with Switch ports
2	WAN Port	One 10/100 Mbps Ethernet
3	Wireless Connectivity	<ul style="list-style-type: none"> 4G, 3G Connectivity Dual SIM support
4	LAN Ports	<ul style="list-style-type: none"> 6-port 10/100-Mbps managed switch with 2 POE Ports
5	Memory	<ul style="list-style-type: none"> Minimum 1 GB DRAM
6	Protocols	<ul style="list-style-type: none"> IPV4, IPV6 Support 802.1Q VLAN DHCP support IGMP SNMP Management
7	Security	<ul style="list-style-type: none"> Support IPSec Support 3DES Support AES
8	Operating Temperature	0 -50 C or better Industrial Grade Rating

#	Parameter	Minimum Specifications
9	Management	Console port for management via a console terminal or PC
10	Compliance	UL, EN, IEC

18.13 Rack Server

#	Item	Minimum Specifications
10.	Processor	Latest series/ generation of 64 bit x86 processor(s) with Ten or higher Cores Processor speed should be minimum 2.4 GHz Minimum 2 processors per each physical server
11.	RAM	Minimum 128 GB ECC Memory per physical server, upgradable up to 256 GB
12.	Internal Storage	2 x 300 GB SAS (10k rpm) hot swap disks
13.	Network interface	2 X 10GbE LAN ports for providing Ethernet connectivity
14.	RAID Support	RAID 0 (mirroring)
15.	Operating System	Licensed version of 64 bit latest version of Linux/ Unix/Microsoft® Windows based Operating system)
16.	Form Factor	Rack
17.	Virtualization	Shall support Industry standard virtualization hypervisor like Hyper-V, VMWARE, Oracle VM etc. OEM of the blade chassis and servers offered should in "Validated Configuration" list and certified by OEM to run virtualisation.

18.14 TOR Switch

#	Item	Minimum Specifications
1	Ports	<ul style="list-style-type: none"> • 24 or 48 (as per density required) 1G/ 10G Ethernet ports (as per internal connection requirements) and extra 2 numbers of Uplink ports (10GE) • All ports can auto-negotiate between all allowable speeds, halfduplex or full duplex and flow control for half-duplex ports.
2	Switch type	Layer 3
3	MAC	Support 32K MAC address.
4	Backplane	Capable of providing wire-speed switching
5	Throughput	Required throughput to achieve non-blocking performance for switch when all ports are populated.
6	Port Features	Must support Port Mirroring, Port Trunking and 802.3ad LACP Link Aggregation port trunks
7	Flow Control	Support IEEE 802.3x flow control for full-duplex mode ports.
8	Protocols	<ul style="list-style-type: none"> • IPV4, IPV6 • Support 802.1D, 802.1S, 802.1w, Rate limiting • Support 802.1X Security standards • Support 802.1Q VLAN

#	Item	Minimum Specifications
		encapsulation, IGMP v1, v2 and v3 snooping • 802.1p Priority Queues, port mirroring, DiffServ • DHCP support • Support up to 1024 VLANs • Support IGMP Snooping and IGMP Querying • Support Multicasting • Should support Loop protection and Loop detection
9	Access Control	• Support port security • Support 802.1x (Port based network access control). • Support for MAC filtering • Should support TACACS+ and RADIUS authentication
10	VLAN	• Support 802.1Q Tagged VLAN and port based VLANs and Private VLAN • The switch must support dynamic VLAN Registration or equivalent • Dynamic Trunking protocol or equivalent
11	. Protocol and Traffic	• Network Time Protocol or equivalent Simple Network Time Protocol support • Switch should support traffic segmentation • Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, TCP/UDP port number
12	Management	• Switch needs to have a console port for management via a console terminal or PC • Must have support SNMP v1,v2 and v3 • Should support 4 groups of RMON • Should have accessibility using Telnet, SSH, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI based software utility and using web interface
13	Resiliency	• Dual load-sharing power supplies • Redundant fans

18.15 San Storage

#	Item	Minimum Specifications
1	Make	Must be specified.
2	Model	Must be specified. All relevant technical brochures must be submitted.
3	Solution/Type	• IP Based/iSCSI/FC/NFS/CIFS
4	Storage	• Storage capacity shall be minimum 20 TB usable, after configuring in offered RAID configuration. • RAID solution offered must protect against double disc failure • Disks should be preferably minimum of 1.2 TB capacity • To store all types of data (Data, Voice, Images, etc.) • Storage system capable of scaling vertically and horizontally
5	Hardware Platform	• Rack-mounted form-factor • Modular design to support controllers and disk drives expansion
6	Controllers	• At least 2 controllers in active/active mode • The controllers/storage nodes should be upgradable seamlessly, without any disruptions/downtime to production workflow for

#	Item	Minimum Specifications
		performance, capacity enhancement and software/firmware upgrades
7	RAID Support	• RAID 0, 1, 1+0, 5+0 and 6 or RAID DP
8	Cache	• Minimum 64 GB of useable cache across all controllers. If cache is provided in additional hardware for unified storage solution, then cache must be over and above 64 GB
9	Redundancy and High Availability	• The storage system should be able to protect the data against single point of failure with respect to hard disks, connectivity interfaces, fans and power supplies
10	Management Software	• All the necessary software (GUI Based) to configure and manage the storage space, RAID configuration, logical drives allocation, snapshots etc. are to be provided for the entire system proposed. • Licenses for the storage management software should include disc capacity/count of the complete solution and any additional disks to be plugged in in the future, up to max capacity of the existing controller/units. • A single command console for entire storage system. • Should also include storage performance monitoring and management software • Should provide the functionality of proactive monitoring of Disk drive and Storage system for all possible disk failures • Should be able to take "snapshots" of the stored data to another logical drive for backup purposes

18.16 Smart Rack

#	Item	Minimum Specifications
1	Type	<ul style="list-style-type: none"> • Smart Rack Design with inbuilt precision AC and UPS • 19" 42U racks mounted on the floor • Floor Standing Server Rack - 42U with Heavy Duty Extruded Aluminium Frame for rigidity. • Top & Bottom cover with cable entry gland plates. Heavy Duty Top and Bottom frame of MS. • Two pairs of 19" mounting angles with 'U' marking. Depth support channels - 3 pairs with an overall weight carrying Capacity of 500Kgs. • All racks should have mounting hardware Packs, Blanking Panels as per requirements. • Stationery Shelf (2 sets per Rack) • All racks must be lockable on all sides with unique key for each rack Racks should have Rear Cable Management channels, Roof and base cable access
2	Wire managers	Two vertical and four horizontal minimum
3	Power Distribution Units	• 2 per rack

#	Item	Minimum Specifications
		Power Distribution Unit - Vertically Mounted, 32AMPs with 25 Power Outputs. (20 Power outs of IEC 320 C13 Sockets & 5 Power outs of 5/15 Amp Sockets), Electronically controlled circuits for Surge & Spike protection, LED readout for the total current being drawn from the channel, 32AMPS MCB, 5 KV AC isolated input to Ground & Output to Ground
4	Doors	<ul style="list-style-type: none"> • Metal framed Glass door • The unit should have humidity and temperature sensor.
5	Metal	Aluminium extruded profile
6	Cooling	Precision Cooling 2 Ton
7	UPS	UPS power for 30 minutes (For all equipment inside)

18.17 Structured Cabling

#	Item	Minimum Specifications
1	Standards	ANSI TIA 568 C for all structured cabling components
2	OEM Warranty	OEM Certification and Warranty of 15-/ 20 years as per OEM standards
3	Certification	UL Listed and Verified

18.18 PVC Conduit

#	Description
1.	The conduits for all systems shall be high impact rigid PVC heavy-duty type and shall comply with I.E.E regulations for non-metallic conduit 1.6 mm thick as per IS 9537/1983.
2.	All sections of conduit and relevant boxes shall be properly cleaned and glued using appropriate epoxy resin glue and the proper connecting pieces, like conduit fittings such as Mild Steel and should be so installed that they can remain accessible for existing cable or the installing of the additional cables.
3.	No conduit less than 20mm external diameter shall be used. Conduit runs shall be so arranged that the cables connected to separate main circuits shall be enclosed in separate conduits, and that all lead and return wire of each circuit shall be run to the same circuit.
4.	All conduits shall be smooth in bore, true in size and all ends where conduits are cut shall be carefully made true and all sharp edges trimmed. All joints between lengths of conduit or between conduit and fittings boxes shall be pushed firmly together and glued properly.
5.	Cables shall not be drawn into conduits until the conduit system is erected, firmly fixed and cleaned out. Not more than two right angle bends or the equivalent shall be permitted between draw and junction boxes. Bending radius shall comply with I.E.E regulations for PVC pipes.
6.	Conduit concealed in the ceiling slab shall run parallel to walls and beams and conduit concealed in the walls shall run vertical or horizontal.

#	Description
7.	The chase in the wall required in the recessed conduit system shall be neatly made and shall be of angle dimensions to permit the conduit to be fixed in the manner desired. Conduit in chase shall be hold by steel hooks of approved design of 60cm centre the chases shall be filled up neatly after erection of conduit and brought to the original finish of the wall with cement concrete mixture 1:3:6 using 6mm thick stone aggregate and course sand.

18.19 Wiring

#	Description
1.	PVC insulated copper conductor cable shall be used for sub circuit runs from the distribution boards to the points and shall be pulled into conduits. They shall be stranded copper conductors with thermoplastic insulation of 650 / 1100 volts grade. Colour code for wiring shall be followed.
2.	Looping system of wiring shall be used, wires shall not be jointed. No reduction of strands is permitted at terminations.
3.	Wherever wiring is run through trunking or raceways, the wires emerging from individual distributions shall be bunched together with cable straps at required regular intervals. Identification ferrules indicating the circuit and D.B. number shall be used for sub main, sub circuit wiring the ferrules shall be provided at both end of each sub main and sub-circuit.
4.	Where, single phase circuits are supplied from a three phase and a neutral distribution board, no conduit shall contain wiring fed from more than one phase in any one room in the premises, where all or part of the electrical load consists of lights, fans and/or other single phase current consuming devices, all shall be connected to the same phase of the supply.
5.	Circuits fed from distinct sources of supply or from different distribution boards or M.C.B.s shall not be bunched in one conduit. In large areas and other situations where the load is divided between two or three phases, no two single-phase switches connected to different phase shall be mounted within two meters of each other.
6.	All splicing shall be done by means of terminal blocks or connectors and no twisting connection between conductors shall be allowed.
7.	Metal clad sockets shall be of die cast non-corroding zinc alloy and deeply recessed contact tubes. Visible scraping type earth terminal shall be provided. Socket shall have push on protective cap.
8.	All power sockets shall be piano type with associate's switch of same capacity. Switch and socket shall be enclosed in a M. S. sheet steel enclosure with the operating knob projecting. Entire assembly shall be suitable for wall mounting with Bakelite be connected on the live wire and neutrals of each circuit shall be continuous everywhere having no fuse or switch installed in the line excepting at the main panels and boards. Each power plug shall be connected to each separate and individual circuit unless specified otherwise. The power wiring shall be kept separate and distinct from lighting and fan wiring. Switch and socket for light and power shall be separate units and not combined one.
9.	Balancing of circuits in three phases installed shall be arranged before installation is taken up. Unless otherwise specified not more than ten light points shall be grouped on one circuit and the load per circuit shall not exceed 1000 watts.

18.20 Cable Work

#	Description
1.	Cable ducts should be of such dimension that the cables laid in it do not touch one another. If found necessary the cable shall be fixed with clamps on the walls of the duct. Cables shall be laid on the walls/on the trays as required using suitable clamping/ fixing arrangement as required. Cables shall be neatly arranged on the trays in such manner that a criss-crossing is avoided and final take off to switch gear is easily facilitated.
2.	All cables will be identified close to their termination point by cable number as per circuit schedule. Cable numbers will be punched on 2mm thick aluminium strips and securely fastened to the. In case of control cables all covers shall be identified by their wire numbers by means of PVC ferrules.

#	Description
	For trip circuit identification additional red ferrules are to be used only in the switch gear / control panels, cables shall be supported so as to prevent appreciable sagging. In general distance between supports shall not be greater than 600mm for horizontal run and 750mm for vertical run.
3.	Each section of the rising mains shall be provided with suitable wall straps so that same the can be mounted on the wall.
4.	Whenever the rising mains pass through the floor they shall be provided with a built-in fire proof barrier so that this barrier restricts the spread of fire through the rising mains from one section to the other adjacent section. Neoprene rubber gaskets shall be provided between the covers and channel to satisfy the operating conditions imposed by temperature weathering, durability etc.
5.	Necessary earthing arrangement shall be made alongside the rising mains enclosure by Mean of a GI strip of adequate size bolted to each section and shall be earthed at both ends. The rising mains enclosure shall be bolted type.
6.	The space between data and power cabling should be as per standards and there should not be any criss-cross wiring of the two, in order to avoid any interference, or corruption of data.

18.21 Networking Standards

- ANSI/TIA-942, Telecommunications Infrastructure Standard for Data Centres
- ANSI/TIA/EIA/568-C.1, Commercial Building Telecommunications Cabling Standard – 2009
- ANSI/TIA/EIA 568-C.2, Copper Cabling Components Standard
- ANSI/TIA/EIA 568-C.3, Optical Fibre Cabling Components Standard
- ANSI/TIA/EIA-569-B, Commercial Building Standard for Telecommunications Pathways and Spaces
- ANSI/TIA/EIA-606-A, Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
- ANSI/J-STD-607-A, Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications

Building Industries Consulting Services International (BICSI) Telecommunications Distribution Methods Manual (TDMM) – Preferred