Request for Proposal

for

"Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City"

RFP Notification No: SCADL_RFP_23-24_04

<u>Issued By:</u> Smart City Ahmedabad Development Limited

December 2024



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1. DISCLAIMER

The information contained in this Request For Proposal ("RFP") whether subsequently provided to the service providers, ("service provider/System Integrators") verbally or in documentary form by Smart City Ahmedabad Development Limited (henceforth referred to as "SCADL" in this document) or any of its employees or advisors, is provided to service provider on the terms and conditions set out in this RFP document and any other terms and conditions subject to which such information is provided. This RFP document is not an agreement and is not an offer or invitation to any party. The purpose of this RFP is to provide the service providers or any other person with information to assist the formulation of their operational plan. This RFP includes statements, which reflect various assumptions and assessments arrived at by SCADL in relation to this scope. This RFP document does not purport to contain all the information each service provider may require. This RFP document may not be appropriate for all persons, and it is not possible for the Chief Executive Officer, SCADL and their employees or advisors to consider the objectives, technical expertise and particular needs of each service provider. The assumptions, assessments, statements and information contained in the RFP documents, may not be complete, accurate, adequate or correct. Each service provider must therefore conduct its own analysis of the information contained in this RFP and to seek its own professional advice from appropriate sources. Information provided in this RFP document to the service provider is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. SCADL accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein. SCADL and their employees and advisors make no representation or warranty and shall incur no liability to any person, including the service provider under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process. SCADL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. SCADL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP. The issue of this RFP document does not imply that SCADL is bound to select a service provider or to appoint the Selected operator (as defined hereinafter), for implementation and SCADL reserves the right to reject all or any of the service provider or proposals without assigning any reason whatsoever. The service provider shall bear all its costs associated with or relating to the preparation and submission of its RFP proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by SCADL or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the service provider and SCADL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a service provider in preparation for submission of the RFP proposal, regardless of the conduct or outcome of the selection process.

2. Notice Inviting Proposal and Necessary Instruction

TT:

SMART CITY AHMEDABAD DEVELOPMENT LTD



Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Request for Proposal (RFP) For

Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Pre-Bid Meeting:	02/01/2025 up to 1500 Hrs.	
Last Date of Online Bid Submission:	16/01/2025 up to 1700 Hrs	
Last Date of Receipt of Physical Bid:	16/01/2025 up to 1700 Hrs	
Detail & Tender available On	www.tender.nprocure.com, www.ahmedabadcity.gov.in & www.smartcityahmedabad.com	
Smart city Ahmedabad Development	Command and Control Centre,	
Ltd. (SCADL) Office Address	Opp. Divan Ballubhai School, Nr. Sanskar Kendra, Paldi, Ahmedabad - 380007	
Email	smartcity@ahmedabadcity.gov.in, scadl.amc@gmail.com	
For any AMC complain/suggest	ion call 155303	

Proposals in prescribed proforma are invited by SCADL from eligible parties for this RFP.

1.	Scope of Work	Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City
2.	Tender submission Cost	Rs. 18,000 /- (Rs. Eighteen Thousand Only) In the form of Demand Draft / Banker's Cheque in favor of "Smart City Ahmedabad Development Limited" drawn on any scheduled / nationalized bank and payable at Ahmedabad.

3.	EMD (bid Security / Security deposit)	Rs. 2,00,00,000 /- (Rs. Two Crores Only) Demand Draft in favor of "Smart City Ahmedabad Development Limited" drawn on any scheduled bank and payable at Ahmedabad OR EMD in the form of bank guarantee with validity of 180 days from the last date of bid submission in favor of "Smart City Ahmedabad Development Limited" from • All Nationalized banks including the Public sector banks - IDBI Ltd. • Private sector banks - AXIS Bank, ICICI Bank and HDFC Bank
4.	Office issuing RFP	Chief Finance Officer (CFO), Smart City Ahmedabad Development Limited, Command and Control Centre, Opp. Divan Ballubhai School, Nr. Sanskar kendra, Paldi, Ahmedabad-380007
5.	Contract Period	5 years from the date of issue of WO which can be extended further for next 2 years on mutual agreement
6.	Bid validity days	180 days from the last date of submission of bids
7.	Issue of Tender	The tender can be downloaded from below websites. https://ahmedabadcity.gov.in https://www.nprocure.com/
8.	Queries by email	Bidders shall have to post queries by email to smartcity@ahmedabadcity.gov.in, scadl.amc@gmail.com on or before 15/11/2024 up to time 05:00 pm
9.	Pre-Bid	Pre-bid will be held on 02/01/2025 at 03:00 pm at Smart City Ahmedabad Development Limited, Command and Control Centre, Opp. Divan Ballubhai School, Nr. Sanskar kendra, Paldi, Ahmedabad-380007
10.	Proposal due date (last date & time of Tender submission)	Tender should be submitted before 16/01/2025 up to 1700 Hrs. Bidder shall upload their bids on https://www.nprocure.com/
11. Submission (in Hard Copy) details may be submitted to reach at following address Smart City Ahmedabad Development Limited, Co		Complete duly signed RFP & proposal in sealed envelope with relevant details may be submitted to reach at following address: Smart City Ahmedabad Development Limited, Command and Control Centre, Opp. Divan Ballubhai School, Nr. Sanskar kendra, Paldi, Ahmedabad-380007
12.	Date & Time of opening of Tender	Pre-Qualification documents will be opened on 16/01/2025 at 06:00 pm in the presence of bidders' representatives. Qualified bidders would be subsequently informed later about the date, time and venue for price bid opening.

13.	Contact persons (For any Clarifications)	Chief Finance Officer (CFO), Smart City Ahmedabad Development Limited, Command and Control Centre, Opp. Divan Ballubhai School, Nr. Sanskar kendra, Paldi, Ahmedabad-380007
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3. Abbreviations

Abbreviation	Description
ANPR	Automatic Number Plate Recognition
UAT User Acceptance Testing	
BoQ	Bill of Quantity
CCTV	Closed Circuit TV
ICCC	Integrated Command and Control center
CR	Change Request
EMD	Earnest Money Deposit
FAT	Final Acceptance Testing
FRS	Functional Requirement Specification
GoI	Government of India
GoG	Government of Gujarat
ICT	Information Communication and Technology
IP	Internet Protocol
LoI	Letter of Intent
O&M	Operations and Maintenance
PBG	Performance Bank Guarantee
РоЕ	Power Over Ethernet
PTZ	Pan, Tilt & Zoom
RLVD	Red Light Violation Detection
RoW	Right of Way
SOP	Standard Operating Procedure
SoW	Scope of Work
SRS	Software Requirement Specification
VMS	Video Management System
NMS	Network Management System
SCADL	Smart City Ahmedabad Development Limited
SITC	Supply, Installation, Testing and Commissioning
TSP	Telecom service provider

4. Definitions

In this document, the following terms shall have following respective meanings:

- 1. User Acceptance Test (UAT)" means the User Acceptance Testing of the ordered product and services on completion of installation and commissioning as per the requirement.
- 2. Acceptance Test Document" means a document, which defines procedures for testing the installed and commissioned product and services against requirements laid down in the Agreement.
- 3. Agreement" means the Service Level Agreement to be signed between the successful bidder and the

- SCADL including all attachments, appendices, all documents incorporated by reference thereto together with any subsequent modifications /changes /corrigendum's, the RFP, the bid offer, the acceptance and all related correspondences, clarifications, presentations.
- 4. Authorized Representative/Agency" shall mean any person/agency authorized by either of the parties.
- 5. "TENDERER" here shall mean "Smart City Ahmedabad Development Limited".
- 6. "Bidder" means any agency who fulfils the requirement laid in the RFP documents and is possess the required expertise and experience as per the RFP document. The word Bidder when used in the pre-award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the successful Bidder with whom TENDERER signs the Service Level Agreement for executing the project.
- 7. "Contract" is used synonymously with Agreement.
- 8. "Field Acceptance Test (FAT)" means the acceptance testing of the commissioned project components at specified locations / Data Centre.
- 9. "Go-Live" means the date on which the FAT of respective location component's as per the Work order has been successfully completed and accepted by the TENDERER.
- 10. "Go Live Date" means the date on which the FAT of all the project component's as per the Work order has been successfully completed and accepted by the TENDERER.
- 11. "Implementation Period" shall mean the period from the date of acceptance of the Work Order and up to the issuance of Final Go-live Certificate.
- 12. "LoI" means Letter of Intent, which constitutes the intention of the TENDERER to place the Work Order with the successful bidder.
- 13. "Work order" shall mean a formal order issued by TENDERER to the successful bidder covering delivery timelines, SLA and other terms and conditions.
- 14. "OEM" Shall stand for Original Equipment manufacturer.
- 15. "Period of Agreement" means implementation period and O&M period considered cumulatively with all the required Hardware, software and Technical & Functional specifications as per the Scope of work for the Project.
- 16. "Third Party Agency" means any agency, if/as appointed by TENDERER for monitoring the Project during commissioning and operation
- 17. "Request for Proposal" means the detailed notification seeking a set of solution(s), services(s), materials and/or any combination of them.
- 18. Planned Downtime" means the unavailability of the application services due to maintenance activities such as configuration changes, upgradation or changes to any supporting infrastructure wherein prior intimation (at least two working days in advance) of such planned outage shall be given and approval sought from the Tenderer.
- 19. Service Down Time" (SDT) means the time period when specified services/network segments with specified technical and operational requirements as mentioned in this document are not available to TENDERER. The services shall be operational on all days of a year and 24- hours/ day with in the uptime specified in the Service Level Agreement (SLA).
- 20. "Unplanned downtime" means an instance other than the planned down time in which ordered services are not available to TENDERER.
- 21. "Uptime" means the time-period when specified services with specified technical and service standards are available to TENDERER and its user organizations. The uptime will be calculated as follows:

"Total time in a quarter (in minutes) less total Service Down time (in minutes) in the quarter"

22. "% Uptime" means ratio of 'up time' (in minutes) in a quarter to Total time in the quarter (in minutes) multiplied by 100.

5. Introduction and background

Ahmedabad is one among forefront in implementation of smart initiatives for urban development projects. Under Smart City Mission Ahmedabad has implemented several new projects namely, Integrated Transport Management System (ITMS), City Surveillance project, e-Challan, Smart Anganwadi, Smart Public Toilet, Digital Payment and establishment of Integrated City Command and Control Centre with several e-Governance projects.

As per the GoI guidelines, Ahmedabad Municipal Corporation (AMC) has formed a Special Purpose Vehicle (SPV) as Smart City Ahmedabad Development Limited (SCADL) for the implementation of projects under the smart city mission. SCADL executes the task of project design, tender preparation, bid process management, selection and on-boarding of implementation agency. SCADL work closely with user departments from AMC and other government departments in implementation and operationalization of various smart city projects.

Ahmedabad was selected among the first 20 Smart Cities in India under the Smart Cities Mission of the Ministry of Housing and Urban Affairs considering the proposals submitted by the Ahmedabad Municipal corporation. A Special Purpose Vehicle (SPV) was formed in 2016 under the mission guidelines and was named as Smart City Ahmedabad Development Limited (SCADL). It carries the end-to-end responsibility for vendor selection, implementation, and operationalization of various Smart City Projects.

The objective was to promote sustainable and inclusive cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of Solutions. Most of the ICT initiatives proposed and being implemented by Ahmedabad city have been identified with a predominant objective to improve public safety and surveillance, traffic management, public services quality, emergency response and real time tracking of municipal services.

5.1 About SASA-ICCC project

SASA-ICCC project has various smart solutions like Integrated Command and Control Center, Smart surveillance system, Smart traffic management system, Public Wi-Fi hotspots, LED/Digital Display panel/boards, and various type of sensors, smart lighting etc. riding on the Pan city ICT infrastructure and city wide point to point connectivity network.

SCADL, AMC and Ahmedabad Police Department, Ahmedabad are the major stakeholders of the entire project. Wherein Police department are utilizing video feeds for city surveillance and intelligent traffic management of the entire city and SCADL is utilizing video feeds and other sensor deployed under the project for efficient and effective management of the municipal services and city operations.

5.2 Objective of RFP

Smart City Ahmedabad Development Limited (SCADL) is inviting proposals from interested bidders for the Supply, Installation, Testing, and Commissioning (SITC), as well as the Operation and Maintenance (O&M) of surveillance system connectivity, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi internet connectivity in Ahmedabad City. In Ahmedabad City, there are currently 130 traffic junctions equipped with comprehensive surveillance and traffic management systems, 159 Wi-Fi locations. This surveillance system incorporated a range of advanced technologies, including surveillance cameras, Automatic Number Plate Recognition (ANPR) Cameras, and Red-Light Violation Detection (RLVD) cameras. The core objective of this project is the expansion of the CCTV camera network, encompassing general surveillance, Automatic Number Plate Recognition (ANPR), and Red Light Violation Detection (RLVD) cameras, Dashcam for surveillance of Municipal infrastructure and SITC of Wi-Fi connectivity.

The scope of the project is divided into two parts as outlined below.

Part A:

- 1. **Surveillance System Expansion**: This includes the deployment of CCTV cameras, Automatic Number Plate Recognition (ANPR) Cameras, and Red-Light Violation Detection (RLVD) Cameras to enhance general surveillance capabilities at new junction locations.
- 2. **Wi-Fi Connectivity**: SITC of Wi-Fi connectivity in Municipal Offices, Library at identify location across the city.

Part B:

SICT of Dashcams: The project includes the SITC of dashcams and operates drones, for the surveillance of municipal infrastructure.

6. Eligibility criteria

The Bidder must possess the requisite experience, strength and capabilities in providing services necessary to meet the requirements as described in the RFP document. Keeping in view of the work involved, following criteria are prescribed as the Bidder's 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 AMC/SCADL 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 in section 6.1.

Note:

For evaluation purpose, following definitions are considered

• The completion / implemented project is defined as those projects that have been installed, commissioned and gone live in last 7 years from the date of publishing of this RFP. If WO date is older than seven (7) years from RFP released date(excluding RFP released date), then work completion certificate must not be older than 6 years from RFP released date. If

WO date & Work completion date falls within seven (7) years from RFP released date(excluding RFP released date), it can be considerable.

- Surveillance project Bidder should have carried out SITC of Outdoor cameras along with the accessories and requisite centralized backend infrastructure for a client.
- Wi-Fi Project: Bidder should have carried out SITC of Wi-Fi connectivity along with the accessories and requisite centralized backend infrastructure for a client.
- For Bidder's Pre-qualification Eligibility criteria the total Project value shall be considered as CAPEX (Capital Expenditure) Cost + OPEX Cost (Operation & Maintenance Cost)
- While showcasing the past experience, the experience of OEM will not be considered as Bidder's experience in Pre-qualification and Technical evaluation unless the Bidder themselves is an OEM.

6.1 Eligibility Pre-Qualification Criteria

Following will be the minimum qualification criteria. Each eligible service provider should possess all the following qualification criteria. Responses not meeting the minimum qualification criteria will be rejected.

#	Description	Pre-Qualification Criteria	Proof Document Required
1.	Legal Entity	 (i) The lead bidder & consortium member should be an Indian firm. (ii) The lead bidder & consortium member should be registered under the Companies Act 1956/2013 in India or a Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008 at the time of the bidding (iii) The lead bidder & consortium member should have a registered number of, GST, Income Tax / Pan number (iv) The lead bidder & consortium member should be in operation in India for a period of minimum 5 years as on publication of bid 	 Certificate of Incorporation / Registration Certificate Copy of PAN card Copy of GST registration
2.	Financial Capability	The Lead bidder should have minimum average annual turnover of >=INR 75 crores from ICT / Surveillance based business in last two financial years (i.e. FY 2022-23 and FY 2023-24)	 The Lead Bidder Copy of the audited profit and loss financial statements Certificate from the statutory auditor / CA clearly specifying the average annual turnover for the

#	Description	Pre-Qualification Criteria	Proof Document Required
			specified years from ICT/Surveillance business. Refer format given in section:20.4 • The Original / Notarized copy of the certificate should be submitted.
3.	Financial Capability II	The Lead Bidder must have positive net worth and should be profit-making in last two (2) financial years (i.e. FY 2022-23,FY 2023-24)	 The Lead Bidder along with Consortium member- Certificate from the Statutory Auditor on net worth (i.e. FY 2022-23 and 2023-24) The Original / Notarized copy of the certificate should be submitted
		The Sole Bidder or the Lead Bidder (In case of Consortium) should have implemented at least one surveillance project (SITC) of value not less than 10 Crore in past 7 years from the date of issuance of this RFP for any Govt. clients (ULB/State Govt. / Central Govt. / PSU)	The Sole Bidder or the Lead Bidder (in case of a Consortium)- In case of Completed project Copy of completion / Go Live certificate issued by client
4.	Bidder's Experience_1	Note: Ongoing projects shall not be considered for the purpose of evaluation. The value of the project should be comprising of the surveillance component (Fixed outdoor / PTZ cameras/ANPR /RLVD cameras,) and associated data center (DC) component only.(setting up or O&M of Data center of components like Network/Servers/Storage/UPS).The value of these corresponding line item in the work order will be considered as the project value.	 Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order pertaining to the components mentioned in the criteria. Copy of contract agreement with client. Project Citation on Bidder's letterhead as per format attached in Section 20.5. Consortium agreement specifying roles and responsibilities, in case of project submitted was executed by a consortium and Bidder was part of the consortium.
		For the consideration of the project, Go live date shall be considered for the purpose of the evaluation.	

#	Description	Pre-Qualification Criteria	Proof Document Required
		If the WO comprises of multiple activities, then bidder will have to provide necessary supporting documents to prove the required experience.	
5.	Bidder's Experience_2	The Sole Bidder or the Lead Bidder (In case of Consortium) should have implemented at least one surveillance project (SITC) covering at least 700 cameras (Outdoor Fixed / PTZ/ANPR/RLVD) and at least one project in past 7 years from the date of issuance of this RFP for any Govt. clients (ULB/State Govt. / Central Govt. / PSU). Note: Ongoing projects shall not be considered for the purpose of evaluation. For the consideration of the project, Go live date shall be considered for the purpose of the evaluation If the WO comprises of multiple activities, then bidder will have to provide necessary supporting documents to prove the required experience.	 The Sole Bidder or the Lead Bidder (in case of a Consortium)- In case of Completed project Copy of completion / Go Live certificate issued by client Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order pertaining to the components mentioned in the criteria. Copy of contract agreement with client. Consortium agreement specifying roles and responsibilities, in case of project submitted was executed by a consortium and Bidder was part of the consortium.
6.	Bidder's Experience_3	The Sole Bidder or the Lead Bidder (In case of Consortium) should have demonstrable experience of Wi-Fi Project (SITC) covering at least 1000 Wi-Fi Access point (Indoor/Outdoor) in past 7 years from the date of issuance of this RFP for any Govt./Private clients ULB/State Govt. / Central Govt. / PSU. Note: Ongoing projects shall not be considered for the purpose of evaluation.	 The Sole Bidder or the Lead Bidder (in case of a Consortium)- In case of Completed project – Copy of completion / Go Live certificate issued by client Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order pertaining to the components mentioned in the criteria. Project Citation on Bidder's letterhead as per format

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

#	Description	Pre-Qualification Criteria	Proof Document Required
		For the consideration of the project, Go live date shall be considered for the purpose of the evaluation If the WO comprises of multiple activities, then bidder will have to provide necessary supporting documents to prove the required experience.	 attached in Section 20.5. Copy of contract agreement with client. Project Citation on Bidder's letterhead as per format attached in Section 20.5. Consortium agreement specifying roles and responsibilities, in case of project submitted was executed by a consortium and Bidder was part of the consortium.
7.	Bidder's Experience_4	The Sole Bidder or the Lead Bidder (In case of Consortium) should have demonstrable experience of SITC of covering of at least 100 AI-capable dashcams in past 7 years from the date of issuance of this RFP in any Govt. clients (ULB/State Govt. / Central Govt. / PSU). Note: If the WO comprises of multiple activities, then bidder will have to provide	The Sole Bidder or the Lead Bidder (in vase of a Consortium)- In case of Completed project — Copy of work order + Completion Certificates from client+ Project Citation per format attached in Section 20.5 In case of ongoing projects - Work order + Certificate from the client mentioning the amount of work
		necessary supporting documents to prove the required experience.	completed
8.	Mandatory Undertaking	 The lead bidder & consortium member and OEM should: Should not have been blacklisted or debarred by any Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of India/Any Government Agency in India as on the date of bid submission. Not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a 	Declaration letter by bidder as per the format given in the RFP document section 20.6. Self-declaration by the Bidder and OEM, duly signed by the authorized signatory on non-judicial stamp paper of INR 300. Note: Original or Notarized copy of self-declaration should be submitted.
		court or a judicial officer, not have its business activities suspended and must not be the subject of legal	

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

#	Description	Pre-Qualification Criteria	Proof Document Required
		proceedings for any of the foregoing reasons. 3. Not have their directors and officers 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.	
9.	Bidder's office	The Lead bidder should have a Permanent Office in Gujarat or should setup in 45 days from the award of Work Order	Copies of any two of the followings: Property Tax/ Electricity/ Telephone Bill/ VAT/ CST Registration / Lease agreement. Or Undertaking to open Office in Gujarat
10.	OEM Partnership	The Lead Bidder should submit valid letter from each of the OEM - confirming the following: OEM shall ensure that all equipment / components / sub- components being supplied by them shall be supported for entire contract period. If the same is desupported by the OEM for any reason whatsoever, the bidder shall replace it with an equivalent or better substitute that is acceptable to Tenderer without any additional cost to the Tenderer and without impacting the performance of the solution in any manner whatsoever.	Authorization Letter/MAF from OEM whose product are being quoted by the bidder on company's letter head signed by authorized signatory in format described in RFP section 20.16. (This clause is applicable only for all types of cameras, network switches, routers, firewall, servers, storage, data center switches, Access Points, all types of software applications in any, Controller & rack, Dashcam, UPS, Battery bank).
11.	Land Border	The lead bidder & consortium member and OEMs is required to submit the undertaking as per the Department of Expenditure, Government of India guidelines on procurement dated 23.07.2020 to confirm that, all the quoted product Make under this bid are not from a country which shares a land border with India or, of if from such a	The Performa for undertaking is enclosed with bid Format in Section 20.17 for Bidder & OEM . The lead bidder & consortium member is required to submit the undertaking on Non-Judicial stamp of Rs 300/- for all quoted product and for OEM on their company letter head

#	Description	Pre-Qualification Criteria	Proof Document Required
		country, quoted product/OEM have	
		been registered with competent	
		authority.	

Note - 1:

- 1. Consortium is allowed in this bid.
- 2. The Bidder must attach valid documents in support to their Pre-Qualification as mentioned above. Without proper supporting documents, the bid proposals are liable to be rejected. The Pre-qualification proposal should be submitted in hard copy with soft version (searchable copy) stored in pen drive.
- 3. The Manufacturer's Authorization Form (MAF) is required for any hardware or software component being supplied as part of this project.
- 4. For all cited projects under Bidder's experience criteria; the Bidders shall have to submit work order with complete BoQ, contract agreement, go-live / completion certificate, proof for O&M as documentary evidence against each of the project.
- 5. SCADL reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical evaluation criteria.
- 6. The bidder needs to provide contact detail (email & phone number) of senior official from client.
- 7. SCADL may invite each Bidder to make a presentation on their proposal. Further, authorities may request written clarifications from the Bidders to clarify ambiguities and uncertainties arising out of the evaluation of the Bid documents.
- 8. In case of conditional bid or major deviations from the RFP requirements, SCADL may at its discretion reject the respective bid and will not be considered for further evaluation process.
- 9. The Bidder is requested to submit a notarized copy of all the documentary evidence.

Note 2: Consortium Clause

- 1. The Bidder is allowed to make a consortium with only one other bidder.
- 2. One Consortium partner can tie up with only one lead bidder for this RFP.
- 3. Companies (parent or child organization) that are part of a leading bidder's group or consortium partner cannot join another consortium as a bidder in this Request for Proposal.
- 4. In case of consortium, the Lead Bidder must be specified by the bidder.
- 5. In case of a consortium, applicant consortia shall have a valid Memorandum of Understanding (MoU) / Consortium Agreement among all the members signed by the CEO / Country Head /

- Authorized Signatories of the companies dated prior to the submission of the bid. The MoU / Consortium Agreement shall clearly state the composition of the consortium who shall be the Lead bidder, the complete description of the partner and roles & responsibilities of the partners.
- 6. The consortium bid submitted without valid MoU / Consortium Agreement shall be treated as non-responsive.
- 7. The contract shall be signed with the Lead Bidder with mentioning name of the consortium partner and the Lead Bidder shall be single Point of Contact for this Project. PBG shall be submitted by the Lead Bidder.
- 8. The payments for the said project shall be released only in the name of Lead Bidder.
- 9. Lead Bidder shall be solely responsible for any failure liable to the Government for the execution of the project in accordance with the terms & conditions of the bid document and a statement of this effect shall be included in the MoU / Consortium Agreement.
- 10. In case of failure of either party of the consortium in delivering any obligation of the SoW of this RFP, the other party of the consortium will be liable to fulfil all the obligations of the SoW of this RFP irrespective of the terms & conditions of the MoU signed between consortium members. In this case, the remaining payments of the contract shall be released to the functioning party only.

6.2 Technical Evaluation Criteria

For technical evaluation, all the pre-qualified Bidder/s would be required to fulfil criteria(s) set forth in this section: Technical Qualification Criteria are as follows:

In case of consortium, all the Technical Evaluation criteria will be evaluated for the Lead bidder.

Sr. No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Gui	idelines	Documentary Evidence
1.	Financial capability	The Bidder having annual average turnover from ICT / surveillance business in last 2 (Two) FY (i.e. FY 2022-23 and FY 2023-24)	20	Average annual Turnover >=75 crores & <= 100 crores >100 & <=125 crores >125 Crores	Marks 10 Marks 15 Marks 20 Marks	 Copy of audited Balance Sheet, audited Profit & Loss statements for each of the last 3 financial Certificate from the statutory auditor / CA clearly specifying the average annual turnover for the specified years from ICT/Surveillance
2.	Experience of Bidder_1	The Bidder should have implemented the surveillance project (Installed, commissioned and gone live) of value not less than 10 Crore in past 7 years from the date of issuance of this RFP for any Govt. clients (ULB/State Govt. / Central Govt. / PSU) Note: Ongoing projects shall not be	15	No. of Completed Project value >=10 Cr. =1 Project 2 Project	Marks 8 Marks 10 Marks	 Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order pertaining to the components mentioned in the criteria Contractual agreement with client
				3 Project	12 Marks	_

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No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Guid	lelines	Documentary Evidence
		evaluation. The value of the project should be comprising of the surveillance component (Fixed outdoor / PTZ cameras/ANPR /RLVD cameras,) and associated data center (DC) component only.(setting up or O&M of Data center of components like Network/Servers/Storage/UPS).The value of these corresponding line item in the work order will be considered as the project value. The project citation submitted by the bidder against PQ criteria to qualify for PQ can also be submitted in TQ along with additional projects to get marks.		>3 Project	15 marks	completion certificate (issued by client) • Project Citation Consortium agreement specifying roles and responsibilities, in case of
3	Experience of Bidder_2	The Bidder having experience of at least one surveillance project (installation, commissioning and gone live) covering at least 700 cameras (outdoor / PTZ/ANPR/RLVD) in past 7 years from the date of issuance of this RFP for any Govt. clients (ULB/State Govt. / Central Govt. / PSU).	15	Number of completed Project (at least 700 cameras in each project)	Marks 8 Marks	 Copy of work order Contractual agreement with client Copy of Golive/Completion certificate (issued by client) Project Citation Consortium agreement

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Sr. No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Guid	lelines	Documentary Evidence
		Note: Ongoing projects shall not be considered for the purpose of evaluation. One such project shall get 8 marks. Every additional project shall be awarded marks as per the marking criteria. The project citation submitted by the bidder against PQ criteria to qualify for PQ can also be submitted in TQ along with additional projects to get marks.		2 Project 3 Project > 3 Project	10 Marks 12 Marks 15 Marks	specifying roles and responsibilities, in case of project submitted was executed by a consortium and Bidder was part of the consortium.
4.	Experience of Bidder_3	The Sole Bidder or the Lead Bidder (In case of Consortium) should have demonstrable experience of Wi-Fi Project (SITC) covering at least 1000 Wi-Fi Access point (Indoor/Outdoor) in past 7 years from the date of issuance of this RFP for any Govt./Private clients ULB/State Govt. / Central Govt. / PSU Note: Ongoing projects shall not be considered for the purpose of evaluation.	10	SITC of Number of Cumulative Wi-Fi AP = 1000 Wi-Fi APs >1000 to <=1200 Wi-Fi APs >1200 to <=1500 Wi-Fi APs >1500 Wi-Fi APs To qualify for 7 marks, must demonstrate the completion of at least to Wi-Fi implementation	successful 1000 APs	 Copy of completion / Go Live certificate issued by client, Copy of Work order clearly highlighting scope of work, Bill of Material and value of contract / order Copy of contract agreement with client Project Citation on Bidder's letterhead as per format attached in Section 20.5. Consortium

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Sr. No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Guid	lelines	Documentary Evidence
		The project citation submitted by the bidder against PQ criteria to qualify for PQ can also be submitted in TQ along with additional projects to get marks.				agreement specifying roles and responsibilities, in case of project submitted was executed by a consortium and Bidder was part of the consortium.
5.	Experience of Bidder_4	The Sole Bidder or the Lead Bidder (In case of Consortium) should have demonstrable experience of SITC of covering of at least 100 AI-capable dashcams in past 7 years from the date of issuance of this RFP in any Govt. clients (ULB/State Govt. / Central Govt. / PSU). Note:	10	SITC of Number of AI-Capable Dashcam = 100 >100 to < 250 >250 to <500 >500	Marks 7 Marks 8 Marks 9 Marks 10 Marks	The Sole Bidder or the Lead Bidder (in vase of a Consortium)- In case of Completed project Copy of work order + Completion Certificates from client+ Project Citation per format attached in Section 20.5
		If the WO comprises of multiple activities, then bidder will have to provide necessary supporting documents to prove the required experience. The project citation submitted by the bidder against PQ criteria to qualify for PQ can also be submitted in TQ along with additional projects to get marks				In case of ongoing projects - Work order + Certificate from the client mentioning the amount of work completed

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Sr. No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Guidelines	Documentary Evidence
6.	People on the project	Bidder should propose quality manpower on site as per mentioned in SOW of this RFP. Based on the proposed qualification, marks shall be given to the Bidder for their proposed manpower	10	SME – CCTV – 2 marks	CV of proposed resources along with the scanned / digital signature of an individual
7.	Presentation	SI's strategy for implantation plan of entire project.	20	 Bidders Approach and Project Management Methodology -8 marks Bidder's implementation schedule and timeline - 5 marks Bidder's risk mitigation plan and approach- 3 marks O&M strategy for maintaining uptime of the network and spare management- 2 marks Manpower deployment strategy - 2 marks 	

Note:

- 1. Experience of Bidder Outside India shall not be considered for the purpose of evaluation under both pre-qualification and technical qualification criteria.
- 2. All the supporting documents should be in English language only however, if in case client document is in other language, Bidder must submit a notarized copy of translated document in English language.
- 3. Minimum qualification mark for technical qualification criteria is **70**. Bidder not achieving **70** marks shall be disqualified. During the evaluation of the Bid, SCADL reserves the right to enquire / seek additional documents / justification to further understand the Bidder's submission against various qualification criteria. Such communication shall be at the discretion of SCADL. No claim from any of the Bidder in this regard shall be entertained for any of the reason(s) pertaining to the bid evaluation.

6.3 OEM Selection criteria

OEM Eligibility criteria for various key components are given in the table below. OEM would need to submit the self-certification. If required Department may ask for additional supporting documents for the compliance to these criteria.

Sr.	Component	Criteria	Documentary Evidence
No.			
1.	Surveillance Cameras(RLVD,ANPR,PTZ) ,Wi-Fi Access point	 i. Should have a registered office in India for past more than 5 years. ii. The MAC address of the IP devices must be registered in the name of quoted OEM product. iii. The MAC address of all hardware components should not be registered in the name of any OEM / company / entity sharing land border with India. iv. Minimum Supply and installation base of 70,000 IP based cameras in India or globally as on bid submission date. Minimum Supply and installation base of 10,000 access point in India or globally as on bid submission date. v. The OEM should have its own RMA setup to fulfil 	 i. Certificate of Incorporation (CIN) ii. Certificate from regulatory body iii. Land border certificate (if required) iv. Undertaking on Bidder and OEM's letterhead v. Undertaking on Bidder and OEM's letterhead vi. Necessary certification from competent authority vii. Undertaking on OEM's letterhead viii. Undertaking on Bidder on 300 Rs stamp and OEM's on
		v. The Ohm should have its own RWH setup to fulfil	300 IW startip and OEM 8 Off

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Sr. No.	Component	Criteria	Documentary Evidence
		its warranty, service, AMC commitments (or via authorized service partner / distributor) in India as on the bid submission date. vi. The OEM should have valid ISO 9001, ISO 27001certifications. vii. The OEM should not have been debarred / blacklisted as per the order by Honorable Court of India. (High Court / Supreme Court / Govt. of India/Smart City SPV or any other govt. department across India). Also There must not be any criminal case logged by any Government authority in any court in last 7 years as on the bid submission date. viii. OEM should comply with land border guidelines, (Undertaking to be submitted).	their company letter head
2.	Server	 i. Minimum installation base of 1,000 Servers in India or globally as on bid publication date. ii. The OEM should have its own RMA setup (or via authorized service partner / distributor) in India as on bid submission date. iii. The OEM should have valid ISO 9001 & ISO 27001 certifications 	 i. Undertaking on Bidder and OEM's letterhead ii. Undertaking on Bidder and OEM's letterhead iii. Necessary certification from competent authority
3.	Storage	 i. Minimum installation base of 900-1000 Storage devices in India or globally as on bid submission date. ii. The OEM should have its own RMA setup (or via authorized service partner / distributor) in India as on bid submission date. iii. The OEM should have valid ISO 9001 & ISO 27001 certifications. 	 i. Undertaking on Bidder and OEM's letterhead ii. Undertaking on Bidder and OEM's letterhead iii. Necessary certification from competent authority

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Sr. No.	Component	Criteria	Documentary Evidence
4.	Network Switches/Routers/Firewall	 i. Minimum installation base of 2500 Network devices in India or globally as on bid submission date. ii. The OEM should have its own RMA setup (or via authorized service partner / distributor) in India as on bid submission date. iii.The OEM should have valid ISO 9001 & ISO 27001certifications. 	 i. Undertaking on Bidder and OEM's letterhead ii. Undertaking on Bidder and OEM's letterhead iii. Necessary certification from competent authority
5	Online UPS	 i. Minimum installation base of 1,000 Online UPS in India or globally as on bid publication date. ii. The OEM should have its own RMA setup (or via authorized service partner / distributor) in India as on bid submission date. iii. The OEM should have valid ISO 9001 certifications 	 i. Undertaking on Bidder and OEM's letterhead ii. Undertaking on Bidder and OEM's letterhead iii. Necessary certification from competent authority

PART: A-SITC of Surveillance Cameras and Wi-Fi Connectivity

7. Scope of work

Selected bidder is responsible for supply, installation, commissioning and O&M of CCTV Cameras, point to multipoint leased lines/L2VPN, Wi-Fi Access Point, Network devices, Server, Storage, IT Infrastructure, Non-IT Infrastructure (Network Cabling, Pole, Gantry etc.) to make it fully functional & integrated with ICCC in the same manner the existing network are implemented.

Bidder is required to execute below mentioned scope of work under this RFP. This is a very high level Scope of Work, which is mentioned to provide an overview of the requirement to the Bidder. Following are the list of tasks to be carried out by the Bidder, which includes but not limited to:

- 1. Supply, Installation, Testing and Commissioning (SITC) of surveillance cameras (RLVD,ANPR,PTZ) along with its associated accessories at new location in Ahmedabad city.
- 2. Supply, Installation, Testing and Commissioning (SITC) of Wi-Fi Internet facility in Ahmedabad City such as Library, AMC locations etc.
- 3. Supply, Installation, Testing and Commissioning (SITC) of IP Network devices(Core Router,L3/L2 Switches/Firewall) / Server/Storage in the Data Center.
- 4. Setting up of Data Centre for the entire project (including civil work for Data Centre).
- 5. SI is responsible to provision for necessary bandwidth and connectivity during the contract period. Provisioning for bandwidth shall be done on bandwidth as a service model.
- 6. Operation and maintenance of all procured elements under this RFP for the entire duration of the contract.
- 7. Bidder will have to deploy manpower during implementation phase and Operation/Maintenance phase.

7.1 Current Scenario

Smart City Ahmedabad Development Limited (SCADL) has implemented various projects to ensure safety, security and better commute to the citizens of Ahmedabad. All these projects are already implemented and is currently in operation & maintenance phase.

For the surveillance network, SCADL has installed a significant number of surveillance cameras across Ahmedabad city. These cameras are placed at Junction locations, critical areas, public spaces, road networks and key infrastructure. There is one integrated Command & Control Center and DC where servers, storage, and workstations are installed to store and monitor/viewing of cameras and all these cameras have been effectively integrated with the Command-and-Control Center (ICCC).

Smart City Ahmedabad Development Limited (SCADL) has made significant advancements in the city's infrastructure. As of now, SCADL has successfully implemented and integrated Wi-Fi connectivity across 159 locations, utilizing 600 access points at BRTS bus stops, zonal offices, hospitals/medical colleges, libraries, parks, and gardens.

7.2 Surveillance System (RLVD/ANPR/Fixed/PTZ cameras)

- a) The bidder shall be responsible for supply, installation, test, commission, and maintenance of Fixed camera, PTZ Camera, ANPR Camera and RLVD Camera including all associated accessories at various sites/junction locations as mentioned. The list of locations will be shared with the successful bidder on later stage.
 - 1. Bidder is required to carry out below major SITC activities, which includes but not limited to:
 - i. RLVD Cameras (1 per arm)
 - ii. ANPR Cameras (1 per lane)
 - iii. Junction box
 - iv. Network Switch
 - v. Power and LAN cabling
 - vi. T&D (RoW to be sought by the Bidder)_
 - vii. Cantilever / Gantry / pole (As per ground requirement)
 - 2. Cameras being the core of the entire Surveillance system, it is important that their selection is carefully done to ensure suitability & accuracy of the information captured on the field and is rugged, durable & compact.
 - 3. The cameras should be capable of capturing high-quality images and videos of vehicles and their license plates, ensuring accurate identification.
 - 4. These cameras need to work on 24x7x365 basis during all weather conditions and transmit video feeds to the Command Control Centre and should be capable to capture the video feeds at a lower FPS during the lean period.
 - 5. SCADL/Police Department may take the regular review of the requirements for video resolution, FPS and may change these numbers to suit certain specific requirements (for example, there could be a situation when certain cameras are required to be viewed at higher FPS for specific period).
 - 6. The cameras will have the functionality to zoom in and pan out on a specific predefined field in its viewing area, detect and track motion etc.
 - 7. The cameras proposed under the project should ensure the use of bit rates and compression techniques such that the bandwidth utilization for the video stream transmission is optimized.
 - 8. Positioning of Cameras should be such that it covers the entire road/lane available at the respective locations.
 - 9. The SI will responsible for the maintenance and Regular patch upgrade of the camera systems.
 - 10. Cameras should be installed on proper pole/Gantry at the locations finalized by the TENDERER. However, there are locations in the city where poles/gantry are already installed/available. It is envisaged that selected bidder should cover the exact availability and requirement of setting up of new poles/gantry in their detailed feasibility status report.

- 11. The cameras supplied by the bidder should be ONVIF compliant and support integration with ONVIF-supported hardware and VMS. The bidder should submit the OEM Authorization for the same along with the technical bid.
- 12. For more details on technical specifications of Cameras, bidder should refer to technical Requirements in this RFP.
- 13. There is a video wall available at the ICCC Paldi location and is currently managed by the existing SI of the SASA O&M project. The bidder will be responsible for connecting several computers to the video wall to display camera feeds.
- 14. The bidder will have to provide RTSP stream of the cameras to existing / new e-Challan vendor for video analytics.
- 15. The proposed Video Management System shall provide a complete end-to-end solution to view live / recorded video of any IP camera on the Network.
- 16. SI shall be responsible to integrate the CCTV system with the EMS and NMS software for SLA monitoring.
- 17. SI shall have to provide the feeds to Police Command Control Center (Ahmedabad Old and New CP office) if required. The cameras feed shall be on real time basic.
- 18. Bidder must share necessary API / SDKs with other agency of SCADL/Police department for the purpose of integration with existing / future system(s) of SCADL. Requirement may come even during the operation and maintenance phase of the project. Bidder must not raise any concern thereof and should not seek any amount for the same.

b) Field execution & compliance requirement for CCTV network

- 1. Bidder will have to construct RCC foundation of minimum 0.7 mtr height for installation of junction box to protect the equipment from water logging.
- 2. After installation of all active & passive equipment in junction box, the door of the junction box must be able to close properly. This will be strictly applicable during O&M phase also.
- 3. Junction box will be installed at one corner of the junction on footpath. Bidder will have to lay power cables & copper cables from junction box till gantry / cantilever / pole and nearby power distribution point of Torrent Power. Bidder will have to lay these cables in underground manner only. No aerial cabling will be allowed.
- 4. For underground installation of the cables, bidder will have to use various methodologies like T&D / HDD / manual borring as per the availability of RoW permission from the authority as well as instruction of the field officer of the authority.
- 5. In case of any RoW permission related issue / field feasibility related issue, temporary aerial cabling will be allowed by SCADL after receipt of detailed justification / survey report from bidder. Once the ROW permission is received, the bidder is required to convert the aerial cable to underground.
- 6. Bidder will have to ensure that all the debris, material, tools, machinery etc. are cleared from field / site immediately after completion of work to avoid any accident in field / injury to citizens / damage to any other asset of citizens.
- 7. The requirement for patch cords between FMS and switch connectivity falls under the scope of the Systems Integrator. Ensure the patch cords meet industry standards and are of sufficient length.
- 8. Bidder will have to ensure that all cables must enter into junction box through bottom cable entry points of the junction box to ensure that the door can be properly closed.

- 9. All the cables inside junction box should be labelled properly & tied properly with cable tie.
- 10. All the cables on gantry / cantilever / pole should be laid inside pvc / flexible pipes (as per field requirement) & pipes should be tied properly with cable tie.
- 11. All types of Cabling(electrical/optical) laying must be carried out as per relevant BIS/IS standards.
- 12. All proper precautions must be taken in advance to avoid rodent cut or any field relevant challenges of weather/atmosphere/field.

7.3 Wi-Fi Internet Connectivity at Municipal building location

The Successful Bidder shall be responsible for Design, Supply, Install, Test, Commission, Operation and Maintenance of Wi-Fi Internet connectivity in Municipal building locations, Library in Ahmedabad City.

- 1. The bidder shall be responsible to provide Indoor design, Installation, cabling, configuration and tuning services.
- 2. The bidder will have to provide uninterrupted /seamless bandwidth/high speed, secure internet access to the officers/users across the locations.
- 3. The bidder shall have to supply and install latest Wi-Fi access point at all locations as per as per the technical specification and scope of work of the RFP.
- 4. The bidder shall have to provide support for 24*7 uninterrupted network at all defined locations.
- 5. The bidder shall have to provide web portal with real time monitoring with active/Inactive users status along with session time in and time out.
- 6. The bidder shall have to provide secured access login on captive portal for officers/users across the locations.
- 7. The solution should support features such as user authentication, access etc. through time bound OTP (One Time Password) on mobile no. & email id. It should be capable to put a cap on the user session and amount of data consumed, regulate bandwidth besides allowing users to buy in the extras usage access. Thereby it shall be required to be integrated with a Payment and SMS Gateway along with a centralized billing mechanism. The proposed solution should have an appropriate billing application/mechanism for the users opting for paid packages plan beyond threshold limit.
- 8. The proposed solution should include applications of Authentication, Authorization and Accounting (AAA), Wi-Fi controller and Radius server.
- 9. Bidder shall ensure integration of AAA / radius server with AMC's existing SMS gateway for OTP delivery. Bidder will have to consider an e-mail gateway in their solution for OTP delivery on an e-mail. Bidder will also ensure integration of Wi-Fi system with any third-party services (as and when required).
- 10. The proposed solution should be fully secured and as per WPC regulations/guidelines.
- 11. Bidder is responsible for keeping log of users by storing minimum required information like Phone No, e-mail address, MAC & IP addresses, access time, duration, data consumed etc
- 12. The proposed solution should allow automatic firmware/ patch upgrade and monitoring from a central Location.
- 13. Auto connect facility at the time of hop-on and hop-off for the officers/users.

14. The bidder is required to submit an OEM authorization letter confirming that proposed controller will allow/support Access Point of any make and model and will be able to auto detect and plug-n-play of Access points.

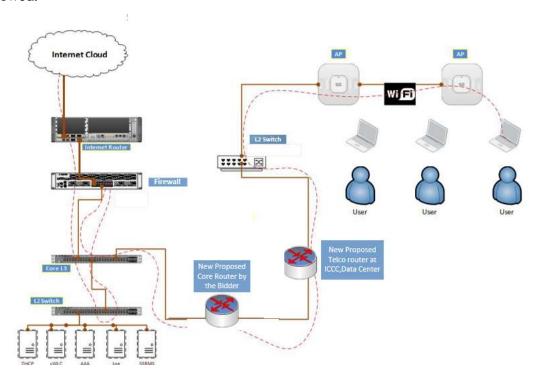
Broad Specifications for Wi-Fi -

- 1) Solution to have self-purchase, voucher/PIN based authentication option for paid access.
- 2) The solution must have integrated SLA monitoring software/NMS to view the health of the Access Points/Status of Network.
- 3) To provide the access logs of Wi-Fi Services used by the end users such as IP details, time stamp/time details, End User Authentication, Mobile No. etc. as per the regulatory requirement under laws/rules/Guidelines issued by Department of Telecom, Government of India or TRAI or any other competent authority as when notified by the Govt. of India. The access logs and other required data as per TRAI and other regulatory agencies shall be made available by the successful bidder.
- 4) Provisioning the access control and audit trail mechanism as per industry standard and security norms defined by various regulatory bodies.
- 5) Provide the web based management console to monitor and manage the Wi-Fi access.
- 6) Ensure adherence to the following Quality of Service parameters
 - 24*7*365 network availability at 99% uptime of Wi-Fi
 - Auto-Connect facility within same premises location, across all Wi Fi hotspots
- 7) Facility to define rule based access depending on usage, time duration, etc.
- 8) Facility to restrict access based on URL, application, category, signature, etc.
- 9) Facility to the designated Government agencies to restrict the Wi-Fi access in case of certain circumstances.
- 10) Seamless facility to extend the usage of Wi-Fi services (beyond free time) through multiple payment mechanisms within the network provided by the bidder.
- 11) Facility to enable/disable specific user/system from Wi-Fi Access based on system MAC address, mobile number used for authentication etc.
- 12) Provide SPOC details of system integrator / Helpline number, E-mail ID for support.

a) Standards, Policies and Other Key Considerations

- The bidder shall ensure the provision of secure wireline Point to multipoint Lease line/L2VPN connectivity from the Service Provider, extending from the Edge location to the Integrated Command and Control Center (ICCC) data center.
- 2) The Uplink is a Point-to-Multi Point/L2VPN link connected directly to Command Control Centre(ICCC Paldi), where all the traffic is aggregated.
- 3) From the ICCC data center, SCADL already has an internet connectivity router in place for sending traffic to the internet. The bidder will be responsible for routing configuration to

- facilitate the transmission of traffic from the data center towards the internet. This shall be done in coordination with the existing Operations & Maintenance System Integrator (O&M SI) of the SASA project, whenever necessary.
- 4) Internet access through user name and password or Mobile OTP based to all the users with centralized authentication mechanism.
- 5) Shall ensure the uniqueness of usernames. Simultaneous multiple logins shall not be allowed.



(Indicative Wi-Fi Network Connectivity diagram)

- 6) Wireless access points shall be encrypted with cryptographic keys to ensure that only authorized and authenticated users can use the WiFi service.
- 7) Proposed wireless network shall be secure and in compliance with the Indian Laws and DoT directives.
- 8) The bidder shall responsible in deploying required policies at various levels to prevent any intrusion attack in the wireless network.
- 9) The bidder shall impose restrictions on access and download from malicious sites for Wi-Fi users.
- 10) SCADL will only provide the space for rack installation at each location. Any infrastructure, furnishings, and hardware at each of the locations will be done by the bidder, as part of the proposed service.

- 11) Installing a power cable from a nearby power source to the WiFi access point or Switches etc. will be the bidder's responsibility.
- 12) At Wi-Fi locations, the CAT6 cables from rack to Wi-Fi APs should be laid inside pvc / flexible pipes / casing capping (as per field requirement).
- 13) The bidder shall be responsible to lay Cat-6 cable for the inter floor connectivity within building if required.
- 14) Bidder will have to supply & install power cables from nearby power point to rack at all Wi-Fi locations / offices along with MCB of required rating.
- 15) The bidder shall bear full responsibility for any agreements related to the resale or commercial use of the provided data. SCADL shall not be held liable for any litigation, disputes, claims, or demands arising from such activities between any parties involved.

b) Design Requirements

- 1) Hotspots should cover inside building areas.
- 2) The bidder will be responsible for design and engineering of all the network components to meet coverage and capacity requirements of hotspots based on the parameters: Area of Wi-Fi hotspot, Peak load and Density of user devices/concurrent users/Connections required in the area.
- 3) Successful bidder should ensure availability of the Wi-Fi services before declaring it ready for rollout to the client.
- 4) Based on the hotspots capacity requirements, The bidder shall determine and provide number of Access points per Hotspot.
- 5) The successful bidder must ensure appropriate bandwidth allocation according to the number of users

c) Technical Components for Wi-Fi connectivity

Components to be provided and installed by the bidder should perform following functions for throughput and bandwidth requirements.

Component	Function	
Access Point	Indoor Wi-Fi Access Point	
WLAN Controller	Virtual Wireless Controller to control and manage Wi-Fi Access Points	
Edge Level Switch	Field level PoE Switches to connect APs	
Wired Network Management System	For Network & LAN infrastructure Management	

Backbone Network	P2MP/L2VPN	Connectivity	from	the	Edge	location	to
	ICCC,Data Cent	ter					

7.4 Server, storage & Core network elements

The Successful Bidder shall be responsible for Design, Supply, Install, Test, Commission, Operation and Maintenance of Servers, Network devices in the data center under the scope of the RFP. Bidder is required to consider following points with respect to the Installation and integration of of data center elements.

- 1. The bidder is responsible for ITC of Data Center Server (includes DB, OS, Virtualization, licenses etc.), Storage etc. for camera video feed storage as a part of the bid.
- 2. The bidder is responsible for providing the solution within a virtualization environment.
- 3. The bidder is responsible to plan for scalable Storage/Server solution in mind for the addition of more cameras in feature.
- 4. The bidder must ensure that the installation and commissioning of the server and storage system will not affect the regular operations of the existing data center. All installation activities should be carried out in a professional manner, adhering to industry best practices and safety guidelines.
- 5. The selected bidder will be responsible for coordinating with the current System Integrator (SI) of SASA O&M project for the integration for the new storage and servers in the ICCC, data center.
- 6. SCADL wishes to establish a new Data Centre (DC) under this project at the same location, where one data center have been established which is currently managed by SASA O&M SI. If in the future, the existing network needs to be connected with the new proposed network, the successful bidder shall coordinate with the SASA O&M SI to make any needed changes in network configuration, Server/Storage configuration that are provided under scope of this RFP.
- 7. The Bidder shall have to install DC Server and Storage as specified in Technical and Functional requirement in Annexure I.

a. Storage/Recording Requirement:

- 1. The Proposed storage solution is that the video feeds would be available for 30 days for all cameras installed as part of this project. After 30 days, the video feeds would be overwritten unless it is flagged or marked by the SCADL / Police for investigation or any other purpose. Further, incidents that are flagged by the Police or any court order, the video of the relevant portion from all relevant cameras should be stored/archived separately for investigation purposes at the Command Control Centre by the TENDERER.
- 2. Retrieval time for any data stored should comply with the defined service level agreements.
- 3. The Video feeds being stored should not result in any loss of quality of video data due to further compression at the time of storage.
- 4. The Recording Servers / System, once configured, shall run independently of the Video Management system, and continue to operate if the Management system is off-line.

- 5. The system shall support the use of separate networks, VLANs or switches for connecting the cameras to the recording servers to provide physical network separation from the clients and facilitate the use of static IP addresses for the devices.
- 6. The system shall allow for the frame rate, bit rate and resolution of each camera to be configured independently for recording. The system shall allow the user to configure groups of cameras with the same frame rate, bit rate and resolution for efficient set-up of multiple cameras simultaneously.
- 7. The system should not limit amount of storage to be allocated for each connected device.
- 8. The system shall support Archiving or the automatic transfer of recordings from a camera's default database to another location on a time-programmable basis without the need for user action or initiation of the archiving process. Archiving shall allow the duration of the camera's recordings to exceed the camera's default database capacity. Archives shall be located on either the recording server or on a connected network drive. If the storage area on a network drive becomes unavailable for recording, the system should have the ability to trigger actions such as the automatic sending of email alerts to necessary personnel.
- 9. The Recording Server / System shall support IP cameras from various manufacturers.
- 10. The Recording Server / System shall support the PTZ protocols of the supported devices listed by the PTZ's camera OEMs.

11. Bandwidth optimization

- The Recording Server / System shall offer different codec (H.265, H.264 with better compression, H.264) and video resolution options for managing the bandwidth utilization for live viewing on the Client systems.
- From the Client systems, the user shall have the option of having video images continually streamed or only updated on motion to conserve bandwidth between the Client systems and the Recording Server.

12. Failover Support

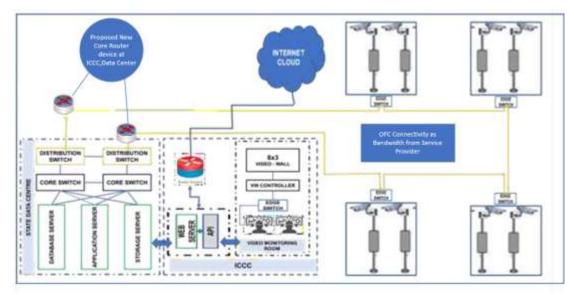
- The system shall support automatic failover for Recording Servers, this functionality shall be accomplished by Failover Server as a standby unit that shall take over if one of a group of designated Recording Servers fails. Recordings shall be synchronized back to the original Recording Server once it is back online.
- The system shall support multiple Failover Servers for a group of Recording Servers.

13. SNMP Support

- The system shall support Simple Network Management Protocol (SNMP) for third-party software systems to monitor and configure the system.
- The system shall act as an SNMP agent which can generate an SNMP trap because of rule activation in addition to other existing rule actions.

7.5 Network/Backbone Connectivity

Bandwidth is required mainly for the following solution and services. Bidder is responsible to design and provide bandwidth from Telecom Service provider for the life cycle of the project. The Bandwidth should be design in redundant mode (Primary and Secondary link at all the Edge Location) with Zero time failure and run entire services 24x7 Hours during entire contract duration.



(Indicative Network Diagram for Junction location)

- The SI shall be required to prepare detailed network architecture of the overall system. Designed network shall be able to provide real time video stream to the Command control center along redundancy to all junction and Wi-FI locations.
- 2. SI is expected to provision for necessary bandwidth and connectivity during the contract period. Provisioning for bandwidth shall be done on bandwidth as a service model.
- 3. The selected SI shall be responsible to provide the detailed requirement of bandwidth at each identified location with proper justification of the same considering the number of cameras and other factors.
- 4. SI shall ensure that redundant, high quality, seamless connectivity is provided to all locations.
- 5. The bidder shall install a new two-DC core router, which will be connected to the proposed telco device at the ICCC Paldi location. SCADL will provide the necessary space and power for the installation of the network devices. The connectivity between the Smart City device (the proposed core device within the bidder's scope) and the telco device will be configured as 1+1 redundancy. This redundancy will be established through two separate, diversified fiber optic paths to ensure that in the event of a failure in one link due to issues with the SFP, patch cord, or port, all traffic from the Junction/WiFi locations will automatically switch over to the other aggregator link without requiring manual intervention.

Additionally, the bidder shall ensure with telco service provider if primary device at telco end is down or equipment failure or powered off or any fiber cut happened on primary link then traffic coming from all Edge location to the data center should not be impacted. This is the minimum requirement set by SCADL.

6. Selected SI will have to ensure that the Telecom Service Provider (TSP) should provide P2MP/L2VPN connectivity at each junction and WiFi location with two physically diversified paths and the last mile OFC connectivity on both diversified paths should come from two different PoP (Point of Present) locations (eNodeB locations / mini exchange

locations / any type of Telco facility). Both the last mile OFC cables should be terminated on same L2 switch and connectivity should work in redundant mode i.e. in case of LM OFC cable cut of primary link / any equipment failure/Powered off on Telco side PoP of primary link / SFP or port failure of the L2 switch of junction on which primary link is terminated, automatic failover of traffic should happen on secondary link in less than 50 millisecond time.

- 7. Last Mile to be defined as "the access link from the service provider's PoP to the edge devices"
- 8. It is expected that SI shall design the networking solution in such a manner that there is no single point of failures at every Junction box, Wi-Fi location and solution meets all the uptime and performance.
- 9. SI shall ensure that the network is available 24x7x365 as per the prescribed SLAs.
- 10. The SI shall prepare the overall network connectivity plan for this project. The plan shall comprise of deployment of network equipment at the junctions, Wi-Fi location to be connected over the P2MP/L2VPN network.
- 11. SI shall be responsible to coordinate with service provider for end-to-end network connectivity at respective site.
- 12. SI shall coordinate with relevant government authorities and all stakeholders/agencies, law enforcement agencies, RoW agency and other internal & external stakeholders to obtain necessary clearances for the end-to-end operationalization of the project during the entire contract duration.
- 13. The IP Pool and network routing requirements are to be finalized by the selected SI in consultation with existing SI which is currently maintaining operation of SASA project network. It is to be noted that the range/class/IP pool may be different. Hence the selected SI should design their solution accordingly and execute only after prior approval from SCADL/AMC.
- 14. The SI shall be responsible for LAN Connectivity including but not limited to physical cabling, L2 Switch configuration at all Edge location, VLAN configuration, load balancing configuration if required and fail over mechanism. The bidder shall coordinate with the existing SASA O&M Project system integrator while designing and configuring the LAN.
- 15. SI shall ensure that the bandwidth estimated and proposed meets the locations' requirement and expected performance level.
- 16. The deliverables as mentioned in this RFP are adhered to and the necessary design to be adopted by the bidder accordingly approval from the SCADL (Smart City Ahmedabad Development Limited).
- 17. Network diagrams at all levels shall be maintained and updated regularly by the SI.
- 18. As per TRAI guidelines, the resale of bandwidth connectivity is not allowed.
- 19. The bidder shall prepare and sign triparties agreement between SCADL, Selected SI and Telecom service provider.
- 20. Service Charges (Capex) and Related Payment (Opex) for the provisioning of bandwidth will be paid to respective Telco service provider by SCADL directly.

Network Access:

 SI shall ensure that Access to network and network resources shall be on need-to-know basis and authorizations shall be obtained from appropriate authorities before providing access.

- 2. Network and network services required for every job function and role shall be identified and verified by the SI.
- 3. Policies detailed in Access Controls Policy User Account Management shall be followed by the SI for providing access to network and network services.

7.6 Mounting structure

Bidder is required to supply, install and commission mounting structure as per on-ground requirement for all the infrastructure being deployed under this project. Bidder should ensure following points.

- 1. This structure should be made of Galvanized Iron (GI) only.
- 2. The SI shall supply all of the necessary equipment, mounting structure (Cantilever pole / Gantry) for the RLVD/ANPR solutions to meet the project requirements mentioned in the RFP.
- 3. The SI shall ensure that all the installations to be as per industry standard. Ensure that the power and LAN cable are properly installed in the pole such that they are protected from damage and tempering. During pole installation, the line-of sight/field-of-view should be checked with test cameras.
- 4. The successful Bidder has to provide structural safety civil certificate from qualified structural engineer, certified by Government Agency for the approval of Pole design and foundations for CCTV system. The standard pole, Cantilever pole and gantry must have a design, which should sustain minimum wind speed of 150 KMPH.
- 5. For installation of Cameras the SI shall provide appropriate poles, Cantilevers, gantry (Depending on the location and weather conditions a durable, corrosion-resistant, and wind-resistant pole material should be chosen) and any other supporting equipment.
- 6. SI should use the industry best practices while positioning and mounting the cameras and ensure that the pole implementation is vibration resistant. Arrangements for bird scare spikes on top of camera shall be made to prevent birds from sitting on top of camera/camera box.
- 7. The poles shall be installed with base plate, pole door, pole distributor block and cover.
- 8. Base frames and screws shall be delivered together with poles and installed by the SI.
- 9. SI shall coordinate and liaison with concerned authorities / municipalities for installation of Pole/Cantilevers/Gantry.
- 10. SI shall ensure that physical look of the installation area is restored to its original state after installation of poles, cantilevers etc. The placement shall be designed keeping in mind the normal flow of vehicular traffic and pedestrian movement is not disturbed.
- 11. The Bidder shall ensure that all the necessary safety requirements for persons working on the signal junctions and Cameras installations are fully complied with provisions in the Corporation's General Safety Precautions. The requirements and precautions to be taken when working on height, on road.
- 12. The ground clearance for the installation of poles, including the cantilever arm and gantry, should be greater than 6 meters.
- 13. The size of the junction box should be able to accommodate the network switch, Fiber trey / Fiber Management System (FMS), surge protection power trip ,MCB, Voltage

- stabilizers etc. material in it and should be made of the GI material only. Proper locking mechanism must be available in the junction box.
- 14. Bidder will maintain an inventory of all components procured. This list will be made available to the AMC/SCADL as and when required.

7.7 Earthing System

All electrical components are to be earthen by connecting two earth tapes from the frame of the component ring and will be connected via several earth electrodes. The cable arm will be earthen through the cable glands. The entire applicable IT infrastructure i.e., Surveillance pole, RLVD, ANPR junction, Wi-Fi racks, Sensors, shall have adequate earthing. Further, earthing should be done as per Local / state / national standard in relevance with IS standard.

Earthing should be done for the entire power system and provisioning should be there to earth Power distribution units, etc. so as to avoid a ground differential.

All metallic objects that are likely to be energized by electric currents should be effectively grounded.

There should be enough space between data and power cabling and there should not be any cross wiring of the two, in order to avoid any interference, or corruption of data.

The earth connections shall be properly made.

A complete copper mesh earthing grid needs to be installed for the server farm area, every rack needs to be connected to this earthing grid. A separate earthing pit needs to be in place for this copper mesh.

7.8 Provisioning of Electricity connection

The Bidder shall have to provision for electrical connection at field junction box. Bidder shall carry out end to end process of provisioning of power from Torrent Power/Electricity board. The connection should be taken onto the name of SCADL only and necessary document shall be provided by SCADL for the application process.

Bidder shall carry out following activities (included but not limited to) pertaining to the provisioning of electric connection:

- i. Submission of application for new connection.
- ii. Submission of requisite fee.
- iii. Liaising with agency, visiting their offices and end to end co-ordination and meeting with utility/electricity boards and their staff.
- iv. Submission of test report, Requisite certification, Drawing as per the agreed format.
- v. Installation and Commissioning of ELCB / MCB, as required by the electricity department.
- vi. Laying of power cable from point provided by Torrent Power/Electricity board and provisioning of requisite power points for all components.
- vii. Ensure expedition of provisioning of power connect at desired location.
- viii. Availability of Bidder's team member during the provisioning of power by the Electrical

department.

However, the expense incurred in provisioning of power connection shall be reimbursed by SCADL at actuals upon submitting documentary evidence (Electricity board payment receipts, test report payment charges etc.).

Please note that Bidder shall also be required to provide necessary support for the recurring payment of electricity board, the support shall include ensuring reaching of electricity bill with SCADL concerned officer, follow-up on bill generation, reconnection process, registering and taking necessary follow-up from electricity department in case of power failure until issue is resolved. However, Bidder need not to make recurring payment to the electricity board, it shall be made by SCADL only.

Please note that SCADL shall not reimburse any additional cost (Other than the actual payment made by the Bidder including deposits, if any) towards charges incurred for provisioning of power at desired locations. Bidder may factor any additional cost pertaining to this requirement in their commercial bid.

7.9 Data Centre requirement

SCADL has an established one integrated command control center in Paldi area and TCC, Shahibaug area in Ahmedabad for ICT projects under Smart city. Bidder is required to consider following points with respect to the Data Centre.

- SCADL wishes to establish a new Data Centre (DC) under this project at the same location, where one (1) data centres have been established. (Location – ICCC building, Paldi, Ahmedabad)
- Actual DC location within the building shall be shown to the Bidder during Pre-bid meeting.
 (Tentative size of the New DC room shall be 20 * 20 feet)
- Bidder is required to carry out complete civil work at new data centre. Bidder may visit the
 data center at ICCC building to understand the requirement. The space which will be
 provided shall be a bare shell and all the associated IT and Non-IT components pertaining
 to the same shall have to be implemented by the Bidder only. Below major components are
 to be installed under the data centre.
 - 1. SITC of Data Center Server (includes DB, OS, Virtualization, licences etc.), Storage, Switches, Router etc.
 - 2. SITC of UPS with along with the requisite battery bank requirement for provisioning of back up of at least 4 hours.
 - 3. Provisioning of power from main distribution line.
 - 4. Civil work includes floor raise, minor modification in the room if required, installation of Precision Air Conditioning systems (PAC), smart lighting, power and electrical cabling, ELCB / MCB, switches, Overhead cable try, on-floor cable tray, partition, if required, Earthing, fire proof color work, separate entry and exit door, wireless fire alarm

- system, smoke detection, fire extinguisher, water leak identification system, rodent repellent system, ramp etc..
- 5. The Bidder is required to install DC server, storage and other devices in new 42U racks.
- 6. The bidder should do structured data cabling from network rack/core switches to each and every equipment in the data center room. The bidder shall also be responsible for testing, proper tagging and certification of the networking in the data center room.
- 7. All the requisite power and network cabling in DC shall be the responsibility of the Bidder only. Entire cabling must be carried out through trey, in-building ducting etc.
- 8. The bidder shall be responsible to provide proper chemical earthing (with <1V between earth and neutral throughout project tenure) for UPS, Equipment, and Rack etc. Please refer section 7.7 for the earthing requirement.
- 9. The bidder is responsible for supply & installation of I/O box, Faceplate, RJ45 connector, crimping. Conduit pipe, flexible pipe and CAT6 UTP Cable.
- 10. SCADL currently has an existing UPS and battery bank room located in front of the proposed data center room. The Bidder is required to provide support for laying power cables from the existing UPS room to the proposed data center room. This includes supplying all necessary materials and performing all related activities to ensure a secure and efficient power connection between the two rooms.
- 11. Bidder shall also supply & install of Industrial Main DB, UPS DB with proper rated MCBs in data center room.
- 12. 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.
- 13. The bidder shall be responsible for installing Power distribution points on both the left and right walls of the data center room, according to the room's infrastructure. This setup is intended to provide dual power level redundancy from the server/network's racks to the Power distribution point, ensuring a reliable and uninterrupted power supply. The bidder is responsible for laying power cables from the distribution points to racks and from distribution points to the UPS room and installing MCBs as per requirement.
- 14. As part of site preparation, bidder should supply & install 2 Nos of 10Tr PAC system. The SI will be required to design, supply, install and test the successful commissioning and satisfactory completion of the PAC systems in the data center room which includes
 - Connecting the indoor unit with the mains electrical point
 - Connecting indoor and outdoor units mechanically (with 18 G hard Gauge Copper piping or better)
 - Connecting indoor and outdoor unit electrically.

- 15. Please note that the above are only indicative requirements of IT & Non-IT Infrastructure requirements at Data Centre.Bidder may visit the data center at ICCC building to understand the requirement. SCADL shall not be responsible for any assumptions made by the Bidder. Also, if Bidder misses to factor the cost of any item required to deliver the solution successfully or under size the solution, then the Bidder has to provide that without any additional cost to SCADL.
- 16. The SI shall ensure the industry standard is followed while carrying out all the allied activities in the Data center. SCADL shall consider poor workmanship / quality of work very seriously and Bidder may have to face necessary impact on account of the same.

7.10 Insurance

Bidder must maintain valid insurance of all the components during the entire duration of the contract. Insurance must cover any damage against loss, theft, vandalism to any of the device, installed as part of this project. The Goods supplied under this Contract shall be comprehensively insured by the Bidder, at their own cost, against any loss or damage due to vandalism, earthquakes, cyclones, fires, or any other similar risks. Bidder shall submit to the Authority, documentary evidence issued by the insurance company, indicating that such insurance has been taken.

Bidder shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the goods and the charges like transportation charges, octroi, etc. that may be applicable till the goods are delivered at the respective sites of installation shall also be borne by Bidder.

In case of theft, Bidder shall register complaint on behalf of the authorities and carry out end to end follow-up on the case with concerned department.

7.11 General instructions/Key Consideration

- 1. The Successful Bidder shall have to integrate all IP/ SNMP enable devices with newly procured application as quoted in their technical bid.
- 2. SI should have their own space / warehouse in Ahmedabad city to keep the project related material at one place. The warehouse / space should be managed for the entire contractual duration by the SI only. SCADL shall not provide any cost thereof to the winning Bidder in this regard.
- 3. SI is responsible to carry out Civil Work (Supply, Erection and commissioning) of Non-IT infrastructure like poles/frames/fixtures/housing etc. with proper electrical earthing (as per IS-3043) wherever required based on the feasibility study report.
- 4. The SI has to ensure that on completion of work, site has to be restored to its original condition as per site requirements.
- 5. The SI shall ensure the industry standard is followed while carrying out all the allied activities as part of the project, should also ensure to carry out the work with industry leading workmanship by keeping the sustainability at the forefront of the execution. SCADL shall consider poor workmanship / quality of work very seriously and Bidder may have to face necessary impact on account of the same.

- 6. After the completion of contract duration, SI shall hand over the entire solution covering all the components in working condition to AMC / SCADL.
- 7. Bidder must procure products with same make and model for all the quantity for a particular product. (i.e., Bidder cannot change the make and model of any product once the partial quantity is procured and remaining is to be procured). Violation to this shall not be entertained by SCADL.
- 8. If in case, it is identified that certain components are required but not quoted by the Bidder, the SI will procure and commission the same without any financial implications. If Bidder misses to factor the cost of any item required to deliver the solution successfully or under size the solution, then the Bidder has to provide that without any additional cost to SCADL
- 9. The System Integrator shall note that the specification provided is the minimum requirement and the System Integrator shall procure better equipment if it is required to meet the service levels mentioned in the RFP.
- 10. It will be selected SI's responsibility to check the compatibility of new hardware / software component with existing hardware / software component in all technical & functional aspects of integration to ensure successful working of the entire system.
- 11. The Bill of Quantity (BOQ) as estimated by SCADL/AMC is not exhaustive. Any additional items/ components like Hardware, Software, any licenses, accessories, service etc. as required to make the project completely operational may be assessed by the Bidder and the same may be incorporated in the offer. Even at the time of execution, if any additional items/ components like Hardware, Software, any licenses, accessories, service etc. are required to execute the Scope of Work (SoW) as part of this RFP, notwithstanding the BOQ as identified by the Bidder, the same shall be provided by the SI at no additional cost to SCADL.
- 12. The SI shall be responsible for carry out security and vulnerability testing on the developed solution to be carried out by a CERT-In empanelled vendor prior to Go Live of the Project without any financial implication to SCADL/AMC. As a result of Security Audit and VAPT the cost of suggested rectification of non-compliance shall be borne by the SI.
- 13. Bidder will have to conduct cyber security assessment every year including VAPT (Vulnerability Assessment and Penetration Testing) through CERT-IN certified agency for entire network including software & applications and will have to resolve identified vulnerabilities. The selected CERT-IN certified agency will be approved by SCADL before onboarding.
- 14. Ensure that all activities adhere to local, state, and national regulations. Implement industry-standard security and privacy measures to protect data and ensure public trust. Bidder must remain compliant with the recent National Data Policy of Government of India.

8. Testing and Acceptance Criteria

8.1 Inspection

Inspection shall involve scrutiny of documents for various IT / Non-IT components to verify if the specifications conform to the technical and functional requirements mentioned in the Tender and subsequent corrigendum. SCADL/AMC reserves right to conduct physical inspection of the equipment delivered to ensure that they arrive at the sites in good condition and are free from physical damage and incomplete shipments and shall return the products to the supplier at the

supplier's expenses if the same is not as per RFP requirements. Physical inspection of hardware will also include physical checking and counting of the delivered equipment in presence of the Successful SI. This equipment will only be acceptable as correct when each received item corresponds with the checklist that will be prepared by the Successful SI prior to shipment. Any shortfalls in terms of number of items received may render the delivered equipment incomplete.

8.2 Final Acceptance Testing

After successful installation of equipment in accordance with the requirements in the RFP, the successful bidder would need to carry out Final Acceptance Testing . The SCADL/AMC shall review and finalize the detailed acceptance test plan proposed by the SI. The SCADL/AMC would also conduct audit of the process, plan and results of the Acceptance Test carried out by the SI for both IT & non-IT components. If required SCADL/AMC may carry out the testing from the third party. The SCADL shall carry out thorough field inspection of all the components commissioned as part of the project and shall share punch points to be resolved with the SI post the field visit, if any. Further, SI to ensure to address those punch points within the span of 8-10 calendar days of receipt of those points and ensure the entire system has achieved the desired functionality for which it was envisaged to be commissioned as part of the project. SI to ensure the quick turnaround in resolution of any concern, that is observed during the entire contractual duration of the project.

The SCADL/AMC would issue certification of completion for which SCADL/AMC shall verify availability of all the defined services as per the RFP. The SI shall be required to demonstrate all the services, features, functionalities as mentioned in the agreement.

Prerequisite for Carrying out FAT activity:

- 1. Detailed test plan shall be developed by the SI and approved by AMC. This shall be submitted by SI before FAT activity to be carried out.
- 2. All documentation related to Ahmedabad Project and relevant acceptance test document (including IT Components, Non IT Components etc.) should be completed & submitted before the final acceptance test to the AMC and SCADL.
- 3. The training requirements as mentioned should be completed before the final acceptance test.
- 4. For both IT & Non-IT equipment's / software manuals / brochures / Data Sheets / CD / DVD / media for all the Ahmedabad Project supplied components.

The FAT shall include the following:

- 1. All hardware and software items must be installed at respective sites as per the specification.
- 2. Availability of all the defined services shall be verified.
- 3. The SI shall be required to demonstrate all the features / facilities / functionalities as mentioned in the RFP.
- 4. The SI shall arrange the test equipment required for performance verification, and will also provide documented test results.

- 5. The SI shall be responsible for the security audit of the establishes system to be carried out by a certified third party as agreed by AMC/SCADL.
- 6. Necessary tests related to civil and electric work covering the pole structure, material, workmanship, etc. will be carried out by the SI as per prevailing standard through government approved entities. SI must carry out cube testing of all the pole / gantry foundations. Necessary certificate for the same shall have to be shared with the SCADL.
- 7. If it is found that the product/solution is not as per expected parameter, AMC/SCADL may ask the SI to carry out testing through its testing entity and the cost in this regard shall have to be borne by the SI. Further, if during any phase of the project, it has been observed that the proposed device / equipment / solution is not working as per the expectation and in accordance with the SLA parameters set forth in the RFP, SCADL may ask Bidder to replace the product (all the devices would be required to be replaced) at no additional cost to SCADL.

Any delay by the SI in the Final Acceptance Testing shall render SI liable to the imposition of appropriate Penalties. However, delays identified beyond the control of SI shall be considered appropriately and as per mutual agreement between SCADL and SI. Please note that Bidder should initiate formal communication in case the work is not being completed before the deadline because of the reason outside the control of the Bidder and in such scenario, penalty shall not be levied from the invoice. Bidder to submit proper, complete, accurate document to understand the concern. If in case it has been observed that Bidder had taken a wrong benefit, necessary liquidated damages shall be imposed on the Bidder from the consequent invoice however, the damage could be in multiples to the actual penalty (depending upon the scenario).

8.3 Go Live Preparedness and Go Live

- 1. SI shall prepare and agree with SCADL/AMC Department, the detailed plan for Go-Live (inline with SCADL/AMC implementation plan as mentioned in RFP).
- 2. The SI shall define and agree with SCADL/AMC, the criteria for Go-Live.
- 3. SI shall submit signed-off UAT report (issue closure report) ensuring all issues raised during UAT are being resolved prior to Go-Live.
- 4. SI shall ensure that Go-Live criteria as mentioned in User acceptance testing of Project is met and SI needs to take approval from SCADL team on the same.
- 5. Go-live of the application shall be done as per the finalized and agreed upon Go-Live plan.
- 6. The decision of AMC/SCADL shall be final and binding in this regard.

Go live shall be issued to the SI only after the completion of all the allied activities, incorporating suggested changes, completion of necessary sign-off and solution is actually put into the use by the concerned department. SI may consider these factors while submitting their bid response against this RFP document.

8. System Documents, User Manuals and Training

The SI shall provide documentation as the project undergoes various stages of implementation and provide all traceability documentation on changes done on the IT components during the

course of the implementation of the solution. Indicative list of documents include:

- 1. Project Commencement: Project Plan should provide micro level activities with milestones & deadline, Resource deployment plan, Unpriced Purchase Orders etc.
- 2. Delivery of Material: Original Manuals from OEMs, Delivery Challans.
- 3. Installation and Commissioning: User Acceptance Test sign-off documents, As built drawing along with the actual location of the installed cable / components etc., Simple Line Diagram (SLD), Inventory of the material utilized under this project, serial no. of the device, MAC address of the device, TAG ID, Latitude /Longitude of installed devices etc.
- 4. Training: Training Material will be provided which will include the presentations used for trainings and also the required relevant documents for the topics being covered.

Training to the staff of SCADL/AMC, Command and Control Centre Operators, Police Department's staff and SCADL's appointed agencies on related operations of the Project.

The Successful bidder shall provide the necessary Training, technical support, Standard Operating Procedure (SOP) and other information to the TENDERER'S.

SI has to provide the above-mentioned required training as and when requested by the SCADL/AMC/Police Department without any additional cost to SCADL/AMC throughout the contract period.

- 5. User Manuals: For all the Application Software Modules, required for operationalization of the system.
- 6. System Manual: For all the Application Software Modules, covering detail information required for its administration.
- 7. Operational Manual: The bidder shall be responsible for preparing Operational Manual relating to operation and maintenance of each service as mentioned in this RFP. The prepared process document shall be formally signed off by Ahmedabad smart city development limited (SCADL) before completion of final acceptance test.

Configuration Manuals for various devices procured under this project shall have to be provided by the Bidder.

Also preparation of daily, weekly, monthly project reports as per the requirement of the project and guideline provided by SCADL.

8. The SI shall be responsible for documenting configuration of all devices and keeping

back up of all configuration files, so as to enable quick recovery in case of failure of devices.

Note: The successful bidder will ensure upkeep & updating of all documentation and manuals during the contractual period. The ownership of all documents, supplied by the Successful Bidder, will be with SCADL. Documents shall be submitted in two copies each in Printed & in Softcopy Formats.

9. Operations and Maintenance for the entire contract duration

Success of the Project would also depend on how the entire Project is managed once the implementation is completed. From the System Integrator perspective too, this is a critical phase since the quarterly payments are linked to the SLAs in the post implementation phase. SI shall provide comprehensive operations and maintenance services for the software, hardware and other IT and Non-IT infrastructure installed as part of project for the entire contract duration. .

System Integrator thus is required to depute a dedicated team of professionals (as per section 10) to manage the Project and ensure adherence to the required SLAs. Please note that no separate payment shall be made to the SI for the deployment of manpower, instead SI is required to adjust such cost in their financial bid.

SI shall provide warranty, Comprehensive AMC (AMC) and maintenance services for the entire solution covering all components including the IT infrastructure, software infrastructure and Non-IT components for the entire contractual duration. SCADL may ask the Bidder to share Comprehensive AMC document during the course of the contract.

Hand-over of the system at the end of the contractual period along with all documentation required to operate and maintain the system. After the completion of contract duration, SI shall hand over the entire solution covering all the components in working condition to AMC/SCADL. SI is responsible for sizing and procuring the necessary hardware and software licenses as per the performance requirements provided in the RFP. SI shall replace or augment or procure higher-level new equipment or additional licenses/hardware at no additional cost to the SCADL/AMC in case the procured hardware or software is not enough or is undersized to meet the service levels and the project requirements.

Following activities to be carried out by SI during Post Implementation Support:

- a. Maintain the entire solution, modify, repair or otherwise make improvements in all components, if any to comply with Technical Specifications, Service Level Agreements specified in RFP.
- b. The Successful Bidder is responsible for performing/carrying out preventive maintenance activity at least once in a quarter and should maintain proper records. Necessary PM activities including cleaning, blowing, dirt removal, realignment etc. will be carried out with proper security and safety measures on a quarterly basis. The PM should be carried out as per industry standard maintaining proper checklist. If required, SCADL/AMC may ask to modify

- the maintenance plan/activity to cover additional components/activities. SI should send the necessary report on a monthly / quarterly basis to AMC/SCADL.
- c. The successful bidder is responsible for upgrading firmware, BIOS and software patches to the latest versions available at regular interval, at no additional cost to SCADL.
- d. SI shall have to replace the product with equal or higher specification, if in case any product is failing on a repetitive basis and / or disrupts the routine business requirements of AMC / SCADL at no additional cost to SCADL.
- e. The SI shall have to stock and provide adequate onsite and offsite spare parts and spare component to ensure that the uptime commitment as per SLA is met. SI shall ensure that at least 5% quantity of all type of Edge devices are available in inventory at any given point of time to avoid any challenges during the O&M phase of the project.
- f. In case if breakdown/ maintenance work is required to be carried out during non-working days/ hours, the Bidder shall attend the task(s) during this period at no additional cost to SCADL.
- g. The SI should either repair the equipment or replace the equipment with existing or new make (brand) matching with same functional & technical specification /higher specifications (that must be approved by SCADL before installation), to ensure that the proposed system/solution is operational. Any equipment is either breakdown, damaged due to the negligence of SI, or any technical reasons, it should be replaced with new equipment without any additional cost to SCADL.
- h. In case the quoted item is not available in the market, the SI shall have to supply higher Version or New Make (brand) matching with same functional and technical specifications with prior approval of SCADL/AMC at no extra cost. No "End of Life"/ refurbished / repaired items shall be supplied & installed either temporary or permanent basis.
- i. In case the procured product (Hardware / Software) is unable to perform as per the expectation of AMC / SCADL and also as envisaged in SLA timeline even after multiple attempts, Bidder should replace the device (Entire quantity) with equivalent or higher category of device at no additional cost to AMC / SCADL. SCADL shall provide such observations to take necessary decision for replacing the product completely.
- j. The SI will supply all the installation material/ accessories/ consumables (e.g., screws, clamps, fasteners, ties anchor, supports, grounding strips, wires, MCB, ELCB, labelling etc.) necessary for the operation of the systems.
- k. Rectification / replacement (as per requirement) of faulty cables (CAT6, power cables etc.) and all types of patch cords in field along with all ancillary accessories. SCADL shall not make any additional payment in this regard. For cables installed in field, selected bidder will be responsible to rectify / replace the cables with the same methodology through which it was installed earlier. For ex.: underground (UG) laid cables will be maintained with UG method only. SCADL may allow temporary change of installation method (for ex. Aerial) considering the field restrictions / challenges in terms of permission availability, technical feasibility etc.
- Ensure uptime and availability of the proposed system/solution, all times of Contract Period
 at all locations in relation to the minimum Service Levels specified in this RFP and the scope
 specified in RFP.
- m. Undertake timely updation of password(s) of all the devices installed as part of the project, no device should have default credentials and all of them must be updated during the

- implementation phase and periodically during the O&M phase of the project.
- n. Provide all MIS report specified in RFP, or any other reports required by SCADL/AMC.
- o. Bidder shall be responsible to work closely with other implementation agency and operation & maintenance agency of SCADL. Bidder must provide necessary support in establishing / maintaining / troubleshooting the concerns pertaining to the network connectivity in the field.
- p. The SI shall not permit anti-social activities/illegal activities on Project Site during the Contract Period. Any liabilities arising as consequences of such event shall be borne by the SI. On occurrence of such event, the SI shall solely be responsible for legal remedies and SCADL/AMC may consider Termination on occurrence of such event.
- q. Take prompt and reasonable action for redressal of each complaint received from users including complaints received by SCADL/AMC.
- r. Obtain and keep valid all applicable permits/ Licenses required by it under applicable laws for carrying out its scope of work during the Contract Period.
- s. The SI shall be required to hand over all the equipment's under the scope of this project in working condition at the time of completion/termination of the Contract, otherwise the equipment, found faulty, shall be rectified from any external agency and whole replacement/repair cost will be borne by the SI only.
- t. Post-implementation period, in case the pole/edge devices is damaged by a vehicular accident (or due to any other reason outside the control of SI) and needs repair, then the corresponding device will not be part of the SLA monitoring for max. 15 days. SI will need to repair / have the new pole/edge device within 15 days of the incident. Post 15 days, the corresponding device would be again considered for SLAs. Damages to be borne by SIs in such cases through proper insurance.
- u. Maintaining / updating the existing project documents (network design documents / drawings, as-build drawings, reports, databases etc.) as per any changes happens in the network infrastructure.
- v. Attending all the meetings by competent project team members of the selected bidder at the prescribed office location as conveyed by SCADL.
- w. The SI shall introduce a comprehensive Assets Management process & appropriate tool to manage the entire lifecycle of every component of the proposed Solution and provide field inventory details to SCADL as and when required
- x. SI Shall Configure, Install, and maintain licensed software required for CCTV system with latest antivirus with all critical updates to be installed on the servers.
- y. SI should have a governance structure in place to report to SCADL/AMC's team on daily, weekly, and monthly basis.
- z. The System Integrator shall provide monitoring and management services during the contract period. The scope of the services shall include Monitoring, Administration and Management of the Data center equipment, Surveillance cameras, Edge/Network switches/Wi-Fi access points delivered as a part of this RFP.

10.1 Network Monitoring Services

The activities shall include:

1. SI shall responsible to monitor network, fault management, change management of Data

- center equipment, Surveillance System, Wi-Fi network to maintain performance at optimum levels on a 24 x 7 basis.
- 2. SI shall responsible for re-configure, troubleshoot etc. related activities for Data center and field devices elements, shall provide requisite support / help troubleshooting to ensure the connectivity is made through till end location / device.
- The SI will conduct break-fix maintenance for the LAN and power cabling, including any associated civil work.

10.2 Vendor Management Services

The activities shall include:

- 1. Coordination with all the project stakeholders to ensure that all activities are carried out in a timely manner.
- 2. SI shall coordinate and follow-up with all the relevant stakeholders and vendors to ensure that the issues are resolved in accordance with the SLAs agreed upon with them.
- 3. SI shall also ensure that unresolved issues are escalated to respective department.
- 4. SI shall maintain database of the various vendors with details like contact person, telephone nos., escalation matrix, response time and resolution time commitments etc.
- 5. SI shall draw a consolidated quarterly SLA performance report across vendors for consideration of the SCADL and Traffic Police.

10.3 Network Management

The objective of this service is to ensure continuous operation and upkeep of the LAN & WAN infrastructure of the project including all active and passive components. The selected SI shall be responsible to coordinate with other agency of SCADL / Telco Service Provider for network related issues between ICCC, DC and field locations. The services to be provided for Network Management include:

- 1. Ensuring that the network is available 24x7x365 as per the prescribed SLAs (Bidder's responsibility is to coordinate with telco Service provider to maintain uptime of All the locations commissioned under this project).
- 2. Attending to and support resolving network failures and snags. (Last mile connectivity validation has to be carried out by the selected Bidder)
- 3. Support and maintain the overall network infrastructure commissioned as part of this project.
- 4. Provide information on performance of Ethernet segments, including capacity utilization and error statistics for the segment and the top-contributing WAN links.
- 5. The Successful Bidder is required to maintain uptime of the Data center equipments, cameras, equipment installed inside JBs, Wi-Fi Network switches and access point to meet the SLA. In case the network uptime is not maintained due to non-availability of link/Bandwidth by Service provider, bidder is required to produce documentary proof (Service Desk Complaints/Incidents or Vendor assigned Tickets) in terms of certificate of downtime of network link/b/w from the service providers. Upon submission of documentary

proof, these downtime shall be considered in bandwidth service provider SLA and service provider would be liable for penalty. If the bidder fails to provide such documentary proof, the reported downtime shall be treated as non-performance of the SLA and bidder would be liable for penalty on whole duration of downtime.

10.4 Provision of Maintenance Vehicle

SI will have to ensure availability of necessary vehicle along with requisite equipment/components like ladder, machinery etc. to carry out implementation and maintenance work (including transportation of items required for Project) during the Contract Period. All the expenses pertaining to vehicle such as driver's expense, fuel, lubricants, maintenance etc., will have to be borne by the SI only. The SI will have to keep minimum 1 number of loaded 4-wheeler vehicle with a ladder for maintenance work. If any required, Additional vehicle shall have to be arranged by the SI. The vehicle and related accessories should follow RTO norms of Government of Gujarat.

10.5 License Management

All the software/Applications/OS licenses should be Perpetual and in the name of the TENDERER.

Successful bidder shall keep the record of all the software licenses and track software usage throughout the IT setup so as to effectively manage the risk of effective usage of software's.

The Successful Bidder shall avoid the unauthorized usage of Licensed Software. In the event of any claim asserted by Third Party of Infringement of Copyright, Patent or Trademark arising from the use of IT components or software, the Successful Bidder shall be entirely responsible to extinguish such a claim. If the successful bidder fails to comply and the TENDERER is required to pay the compensation to the Third Party resulting from such infringement, the bidder shall be responsible for the compensation including all expenses, court costs and lawyer fees.

10.6 Hand-over of the system at the end of contractual period along with all documentation required to operate and maintain the system

System Integrator will provide to the AMC / SCADL the following before the expiry of the contract:

Information relating to the current services rendered and data relating to the performance of the services; Entire documentation relating to various components of the Project, any other data and confidential information related to the Project;

All the devices, which are procured as part of the project must be in the working condition on the day of hand-over of the project. Bidder may have to provide device working demonstration to AMC / SCADL / representative of SCADL / new vendor to whom the task is being assigned.

All other information (including but not limited to documents, records, and agreements) related to the project's products and services must be provided to SCADL, its nominated agencies, or the new SI. This will help them review everything and smoothly take over the project.

10. Manpower Requirement

- 1. The minimum requirement of manpower resources, their qualification and responsibility of each resource is given below. The Bidder has to ensure that appropriate qualified manpower with requisite skill sets is deputed for the project.
- 2. The complete and true details of all the proposed resources such as educational qualification with year and stream of any degree, all past employment records with month and year of deployment under all the projects, all the certifications and training undertaken etc. must be mentioned in the CVs while submitting the same in the bid proposal. The CVs of all the proposed resources must be submitted as per the format provided in Section 20.18.
- 3. The successful Bidder shall depute the resources as per the requirements for carrying out the implementation activities as well as O&M Activities and maintaining the SLA. This is minimum indicative list of resources and based on actual requirements, the Bidder may deploy any number of resources to meet the SLA. No additional charge shall be paid to the Bidder for any additional manpower deployment. Please note that Bidder shall have to deploy adequate field resources over and above the mentioned proposed list of resources. Bidder should make an estimation for the field resource requirement and should increase if in case the number of manpower is not sufficient to manage the entire project without any additional cost to SCADL/AMC.
- 4. There are no separate line items for the manpower deployment for the project, however, Bidder is required to deploy adequate manpower to cater to the requirement stated in this RFP document. Bidder shall be penalized for non-deployment of required manpower during the course of the project.
- 5. In case deputed employee/staff is not available or is on leave, the successful Bidder is required to provide the alternative personnel with same or higher technical capabilities of the non- available personnel based on prior approval from SCADL.
- 6. The manpower deployed for the project should be without any criminal background / record. The successful Bidder must submit declaration certificate of all deployed manpower to SCADL before deputation in this regard. SCADL reserves right to undertake interview of the proposed resources at the beginning of the deployment or prior to approval of change request. Also, SCADL reserves the right to carry out background verification of the personnel proposed on the Project for verification of criminal record, at the beginning of deployment or during deployment.

- 7. The successful Bidder shall have to provide replacement for any employee who is either leaving the firm / not suitable for assignment. The replacement personnel should be of the same or higher technical capabilities and with prior approval from SCADL.
- 8. Please note that it is a minimum requirement for the manpower deployment, Bidder is free to deploy additional resources by keeping SCADL informed about their deployment.
- 9. Deployment of full / part time Civil engineer is in the scope of the Bidder. SCADL reserves the right to impose necessary penalty on non-availability of the resource.

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Sr. No.	Designation	Qty	Roles & Responsibilities	Desired Qualification
1.	Project Manager (required during implementation and O&M phase)	1	 Overall incharge of implementation of the complete project for the entire contract duration Coordinating with third party agencies, Telco service provider and software/equipment's vendors. Should be the single point contact (SPOC) for managerial responsibilities and direct interface with the SCADL. Responsible for ensuring timely delivery of all the milestones and timely resolution of all the concerns. 	 BE /B. Tech (CE, CS, IT or EC) with M.Tech / MBA 15+ Years of Post Qualification Experience in large scale ICT Infrastructure projects Relevant Exp.: Relevant Exp.: 7+ Years of experience as a project manager of large-scale ICT infrastructure or WAN/MAN Projects
2.	Network Expert (required during implementation phase and O & M phase)	1	 The resource should be able to manage the NMS Tools Installation, Configuration, Commissioning, Managing and monitoring Network operations Responsible for monitoring of adherence to defined SLA for system by making effective utilization of NMS tools 	 BE /B. Tech (EC,IT,CE) Must have CCNP or higher (or equivalent) certification 7+ Years of Post Qualification Experience in large scale ICT infrastructure projects. Relevant Exp.: 3+ Years of experience of working on Network implementation/large-scale ICT infrastructure WAN/MAN Projects
	Data Center,			BE/B.Tech/MCA in computer science/ IT/E.C with CDCP

Sr. No.	Designation	Qty	Roles & Responsibilities	Desired Qualification
3.	Server & Storage Expert (required during implementation and O&M phase)	1	 Should be responsible for designing, installation, configuration, testing, maintaining, monitoring, supporting, and troubleshooting all server, storage & backup components of the Data Centre Management of virtual machines Resource allocation for any new requirement Real-time monitoring, log maintenance and reporting of backup status on a regular basis. Prompt problem resolution in case of failures in the backup processes. Monitoring and enhancement of the performance of scheduled backups, schedule regular testing of backups and ensure adherence to related 	or CDCS certification (or equivalent) • 7+ years of Post Qualification experience in supporting servers, configuring network and storage, server environment, antivirus administration and administer DNS and DHCP • Relevant Experience: 5+ years of experience with physical servers, blade servers, and rack servers. • Expertise in SAN (Storage Area Networks), NAS (Network Attached Storage), RAID configurations, and backup solutions. • VMware, Hyper-V, and other hypervisors for virtualized environments , for large scale ICT project implementations.
4.	CCTV /VMS expert (required during implementation and O&M phase)	1	 Should be responsible for configuring, commissioning, monitoring & managing entire CCTV surveillance network Able to configure alerts, analytics & manage Video management software. Should be responsible for monitoring of adherence to defined SLA for system by making effective utilization of CCTV surveillance. 	 BE/B.Tech or higher 5+ Years of Post Qualification Experience in large scale ICT projects Relevant experience: Experience in configuration, installation and commissioning of IP cameras for surveillance, VMS and Video analytics.

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Sr. No.	Designation	Qty	Roles & Responsibilities	Desired Qualification
5.	Site Civil Engineer (required on an ad-hoc basis)	1	 Should be responsible for undertaking, managing and monitoring all the civil activities involved in the project Engineer must remain available during the civil work is in progress. 	 B.E. / B.Tech (Civil) or higher 2+ years of Post qualification experience
	Network Engineers (required during implementation and O&M phase)	6	 Installation, commissioning, Troubleshooting of all the network equipment Maintenance, Monitor & Support for network equipment Regular update of software patches, antivirus etc. Any other activities as and when required. 	 BE /B. Tech with CCNA or higher certification. 3+ years of similar type post qualification experience
7-	NOC engineer (Required Implantation and during O&M phase)	4	 Should be responsible for undertaking, managing and monitoring all the field activities involved during the Operation and maintenance (O&M) phase of the project Minimum 4 resources should be available during the entire contractual duration, Bidder shall have to have additional resources to maintain rotation. Willingness to work in shifts, including nights, weekends, and holidays, as NOC operations often require 24/7 coverage Responsible for monitoring of adherence to defined SLA by vendors by making effective utilization of deployed NMS tools 	 BE /B. Tech (EC/IT/CE) with CCNA or higher certification Relevant Exp.: 3 -5 years of experience in network operations, network support, or a related field. Experience of working of NMS Tool Hands-on experience with diagnosing, troubleshooting, and resolving network issues
8.			p to selected bidder to plan field man & conditions of the RFP.	npower / teams to fulfill all the

11. Project Timelines and Payment Terms

Project completion timeline is considered from the date of issuance of the work order to the SI.

T = Date of issuance of Work Order

T1 = Team mobilization / deployment period = T+15 days

12.1 Implementation timeline for Central Hardware Infrastructure (Data Center)

Sr. No.	Milestone for the Implementation	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
M1	Completion of Site Survey and Successful Installation, commissioning of PAC, UPS and reediness of Data center room w.r.t SOW mentioned the RFP	10% of the Sum, Total A of schedule I of financial bid	Month from date of issuance of work order (T+ 1.5	A penalty of 0.5% of the Sum, Total A of schedule I of financial bid for Delay for every Week or part thereof. Delay beyond T+ 3 -month, TENDERER may terminate the Work Order/Contract and forfeit the PBG	 Material Delivery Challan Site Photos FAT Sign off & Closure of Observations Report Attendance of the Resources deployed Site Survey Reports, BOQ & Drawings
M2	Successful Delivery and Inspection of Hardware Equipment (Network/Servers/Storage/ UPS/PAC etc.) at the central location/ Bidder's Warehouse	30% of the Sum, Total A of schedule I of financial bid	Month from date of issuance of work order (T+ 2 Month)	A penalty of 0.5% of the Sum, Total A of schedule I of financial bid for Delay for every Week or part thereof. Delay beyond T+ 4-month, TENDERER may terminate the Work Order/Contract and forfeit the PBG	 Material Delivery Challan Materials photos Material Inspection Sign Off Attendance of the Resources deployed
М3	Successful Installation, commissioning, and FAT of Hardware Equipment along with required OS, DB & virtualization platform at Data Center	40% of the Sum, Total A of schedule I of financial bid	Within 4 Month from date of issuance of work order (T+ 4 Month)	A penalty of 2% of Sum, Total A of schedule I of financial bid for Delay for every Week or part thereof. Delay beyond T+ 6-month, TENDERER may terminate the Work Order/Contract and forfeit the PBG	 Installation and commissioning Report (Central Location) Site Photos FAT Sign off & Closure of Observations Report Training Completion Report VA/PT &

Sr. No.	Milestone for the Implementation	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
 M4	Successful Completion of 3 months from the date of Issuance of successful FAT Certificate of All the equipment	20% of the Sum, Total A of schedule I of financial bid			Security Audit certificate 6. Server and storage Report 7. NMS Report 8. SOP of all IT & Non- IT Infrastructure 9. Attendance of the Resources deployed 1. SLA Report 2. Preventive Maintenance Report 3. Attendance of the
	covered in the Scope of the Work				Resources deployed 4. Go-Live Report

Note:

- 1. The SI shall prepare and submit the detailed feasibility study report including final Bill of Quantity (BoQ) within the specified time limit from the date of issuance of LoI /Work Order.
- 2. SCADL will complete FAT & issue FAT completion certificate or issue list of punch points within 7 days of FAT offer from SI. SI should plan activities & their completion accordingly so that FAT completion is achieved within milestone completion timeline to avoid delay penalty.
- 3. These SLAs shall be used to evaluate the timelines for completion of deliverables till Go-Live date.
- 4. "Go Live Date" means the date on which the FAT as per the RFP document has been successfully completed and formally accepted by the TENDERER.
- 5. Maximum Penalty cap for penalty for delay is 10% of Sum, Total A of schedule I of financial bid.
- 6. The bidder shall raise invoice on post completion of each milestone during implementation phase.
- 7. After the go-live phase, the operation and maintenance of data center equipment will commence, and the bidder will be eligible to claim O&M payments as specified in Schedule-II of OPEX Table B3 of the financial bid. 100% SLA and appropriate penalty will be applicable during O&M period once milestone moves in to O&M phase. Payments to the bidder will be made after deducting any applicable penalties.
- 8. The successful bidder shall submit invoices along with the necessary supporting documents confirming milestone achieved and other documents as required by SCADL for processing of invoices. Invoice should be raised in English language only.
- 9. SCADL shall verify the Invoices raised against the milestone achieved and shall make the payment.
- 10. Any delay by the SI in the final acceptance testing shall render him liable to the imposition of appropriate penalties. Therefore, SI shall complete installation and conduct the Final Acceptance Test within the specified time.
- 11. If TENDERER fails to provide space and related clearances to carry out the job as per the agreement terms, as a result of which the installation of the equipment is delayed, and the selected agency is not able to adhere to the schedule for completing the Acceptance Tests. Delay solely on account on above will not be accounted while ascertaining actual delay and penalties thereof. Informing the client in due time of the cause of such delay falls within the responsibility of the SI.

12. For calculation of delay any dependencies from TENDERER side will be excluded.

12.2 Implementation timeline for End Device and Edge Location Infrastructure:

T = Date of issuance of Work Order

T1 = Team mobilization / deployment period = T+15 days

Sr. No.	Milestone for the Implementatio n	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
M1	Completion of Site Survey and finalization of BoQ		months from date of issuance of work order (T+1.5 months)	financial bid for Delay for every Week or part thereof. Delay beyond T+ 3 months, TENDERER may terminate the Work Order/Contract and forfeit the PBG	1. Site Survey Reports, BOQ & Drawings
M2	 SITC of City Surveillance infrastructure at 20% of total identified locations SITC of Wi-Fi infrastructure at 20% of total identified locations. SITC of virtual controller for Wi-Fi Applications 	Monthly: submission of 1 bill / month will be allowed. Successful bidder will include supply & ITC line items (B1 & B2) for all field elements for which UAT is completed in a monthly bill. SCADL will pay 90% amount. Balance 10% of all monthly bills will be paid after 3 months of completion of this	months	A penalty of 0.5% of Total Component value (Sum of Total B of schedule I of financial bid) for every Week or part thereof. Delay beyond T+ 6 -month TENDERER may terminate the contract and forfeit the PBG	 IT & Non-IT Infrastructure Installation and commissioning Report (Edge Location) Site Photos Application deployment & Configuration Report UAT Sign off for all software applications with closure of all punch points NMS and VMS node discovery report
	Пристопо	milestone. Virtual controller for Wi-Fi: 20% payment of line item – 1 of B3 table (Schedule-I) after the successful discovery of all			6. Server and storage Report 7. Successful FAT Report for this milestone with closure of all punch points

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Sr. No.	Milestone for the Implementatio n	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
		associated IP devices and Access points of these milestone into the NMS and controllers			8. Attendance of the Resource deployed for Implementation phase
М3	Phase-2: SITC of City Surveillance infrastructure at 20% of total identified locations SITC of Wi-Fi infrastructure at 20% of total identified locations.	Monthly: submission of 1 bill / month will be allowed. Successful bidder will include supply & ITC line items (B1 & B2) for all field elements for which UAT is completed in a monthly bill. SCADL will pay 90% amount. Balance 10% of all monthly bills will be paid after 3 months of completion of this milestone. Virtual controller for Wi-Fi: 20% payment of line item – 1 of B3 table (Schedule-I) after the successful discovery of all associated IP devices and Access points of these milestone into the NMS and		A penalty of 0.5% of Total Component value (Sum of total B of schedule I of financial bid) for every Week or part thereof. Delay beyond T+ 9 - month TENDERER may terminate the contract and forfeit the PBG	 IT & Non-IT Infrastructure Installation and commissioning Report (Edge Location) Site Photos Application deployment & Configuration Report NMS and VMS node discovery report Server and storage Report Successful FAT Report for this milestone with closure of all punch points Attendance of the Resource deployed for Implementation phase
M4	Phase-3: SITC of City Surveillance	controllers Monthly: submission of 1 bill / month will be allowed.	T + 10 months	A penalty of 0.5% of Total Component value (Sum of total B of schedule I of financial bid) for every	1. IT & Non-IT Infrastructure Installation and commissioning Report (Edge Location) 2. Site Photos

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Sr. No.	Milestone for the Implementatio n	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
	infrastructure at 20% of total identified locations • SITC of Wi-Fi infrastructure at 20% of total identified locations.	Successful bidder will include supply & ITC line items (B1 & B2) for all field elements for which UAT is completed in a monthly bill. SCADL will pay 90% amount. Balance 10% of all monthly bills will be paid after 3 months of completion of this milestone. Virtual controller for Wi-Fi: 20% payment of line item – 1 of B3 table (Schedule-I) after the successful discovery of all associated IP devices and Access points of these milestone into the NMS and controller		Week or part thereof. Delay beyond T+ 12 -month TENDERER may terminate the contract and forfeit the PBG	 Application deployment & Configuration Report NMS and VMS node discovery report Server and storage Report Successful FAT Report for this milestone with closure of all punch points Attendance of the Resource deployed for Implementation phase
M5	 Phase-4: SITC of City Surveillance infrastructure at 20% of total identified locations SITC of Wi-Fi infrastructure at 20% of total identified locations. 	Monthly: submission of 1 bill / month will be allowed. Successful bidder will include supply & ITC line items (B1 & B2) for all field elements for which UAT is completed in a monthly bill. SCADL will pay 90% amount. Balance 10% of all monthly bills will be paid after 3 months of completion of this milestone.	T + 13 months	A penalty of 0.5% of Total Component value (Sum of total B of schedule I of financial bid) for every Week or part thereof. Delay beyond T+ 15 - month TENDERER may terminate the contract and forfeit the PBG	 IT & Non-IT Infrastructure Installation and commissioning Report (Edge Location) Site Photos Application deployment & Configuration Report NMS and VMS node discovery report Server and storage Report Successful FAT Report for this milestone with closure of all punch points

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Sr. No.	Milestone for the Implementatio n	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
		Virtual controller for Wi-Fi: 20% payment of line item – 1 of B3 table (Schedule-I) after the successful discovery of all associated IP devices and Access points of these milestone into the NMS and controller			7. Attendance of the Resource deployed for Implementation phase
M6	Phase-5: SITC of City Surveillance infrastructure at 20% of total identified locations SITC of Wi-Fi infrastructure at 20% of total identified locations.	Monthly: submission of 1 bill / month will be allowed. Successful bidder will include supply & ITC line items (B1 & B2) for all field elements for which UAT is completed in a monthly bill. SCADL will pay 80% amount. Balance 10% of all monthly bills will be paid after 3 months of completion of this milestone and 10% will be paid after Final Go-Live of the Solution Virtual controller for Wi-Fi: 20% payment of line item – 1 of B3 table (Schedule-I) after the successful discovery of all associated IP devices and Access points of these milestone into the NMS and controller.	T + 16 months	A penalty of o.5% of Total Component value (Sum of total B of schedule I of financial bid) for every Week or part thereof. Delay beyond T+ 18 -month TENDERER may terminate the contract and forfeit the PBG	 IT & Non-IT Infrastructure Installation and commissioning Report (Edge Location) Site Photos Application deployment & Configuration Report NMS and VMS node discovery report Server and storage Report Successful FAT Report for this milestone with closure of all punch points Attendance of the Resource deployed for Implementation phase

Sr. No.	Milestone for the Implementatio n	Payment Schedule	Time Schedule	Penalty for Delay	Deliverables
,	Submission of SOP & Final Go- Live of the Solution		T + 18 month		 SOP of all IT & Non-IT Infrastructure Go-live report of All milestones. Closure of Observations Report Server and storage Report Attendance of the Resource deployed for Implementation phase

Note:

- 1. The SI shall prepare and submit the detailed feasibility study report including final Bill of Quantity (BoQ) within the specified time limit from the date of issuance of LoI /Work Order.
- 2. SCADL will complete FAT & issue FAT completion certificate or issue list of punch points within 7 days of FAT offer from SI. SI should plan all field activities & their completion accordingly so that FAT completion is achieved within milestone completion timeline to avoid delay penalty.
- 3. The milestone completion date is defined as the date on which the FAT for the respective location components, as specified in the milestone, has been successfully completed and accepted by the TENDERER
- 4. P2MP/L2VPN connectivity will be required for FAT of any junction / Wi-Fi location. Therefore, it is up to successful bidder to decide when to give WO to TSP (Telecom Service Provider) to provision any link considering all parameters like time required to make RoW applications, RoW permission availability from authority, time required for field work etc. Any delay in link provisioning will be responsibility of the bidder and accordingly, delay penalty will be levied. SCADL & AMC will extend full support to provide RoW permission at earliest possible time & not letter than 30 days from submission of RoW application (also refer example given below in sr. no. 5).
- 5. Power connection availability will also be required for FAT of any junction / location. Therefore, it is up to successful bidder to submit an application to Torrent Power at earliest after completion of field survey for junctions / locations. SCADL & AMC will extend full support to provide RoW permission to Torrent Power (wherever required) at earliest possible time. Informing the client in due time of the cause of such delay falls within the responsibility of the SI.
- 6. Example: Let's say 20 junctions are to be completed in 1 quarter (90 days). TSP submits RoW applications for all 20 junctions at various intervals in first 50 days. At the end of the quarter, let's say work of 3 junctions remains incomplete (FAT not completed). Out of 3, 2 junctions are pending due to lack of RoW permission availability from AMC and 1 junction is pending due to SI. Both these RoW application's aging is 40+ days in this example. Let's say last RoW permission of this milestone for 2nd junction (out of 2 pending) is given by AMC on 100th day which is 50th day from submission of RoW

- application. Therefore, 20 days (50 30) relaxation will be provided to SI while calculating delay penalty provided if SI has completed (FAT completion) 1 pending junction in its own bucket before release of last RoW permission. If SI doesn't complete (FAT completion) 1 pending junction in its own bucket before release of last RoW permission, no relaxation will be provided in such case.
- 7. If TENDERER fails to provide space and related clearances for the installation of devices in field to carry out the job as per the agreement terms, as a result of which the installation of the equipment is delayed, and the selected agency is not able to adhere to the schedule for completing the Acceptance Tests. Delay solely on account on above will not be accounted while ascertaining actual delay and penalties thereof. Informing the client in due time of the cause of such delay falls within the responsibility of the SI.
- 8. The FAT will be provided in each respective milestone as mentioned in above table.
- 9. "Go-Live date" means the date on which the FAT of all project component's as per the Work order has been successfully completed and accepted by the TENDERER.
- 10. SCADL reserves the final authority to make decisions regarding the issuance of FAT certificates in each milestone. Any decisions made by SCADL in this context will be final and binding. No claims from the Bidder concerning this matter will be entertained.
- 11. TSP will have to submit OTC bill directly to SCADL as per the terms & conditions of the tripartite agreement once FAT is successfully completed for any junction / location. TSP will be allowed to submit 1 bill every month for OTC charges. Before making a payment to TSP, SCADL will inform successful bidder to check if any delay in implementation is attributable to TSP. Upon joint agreement & consensus of both successful bidder (SI) & TSP on delay penalty attributable to TSP, SCADL will pay to TSP within one month.
- 12. Bidder should commence installation and commissioning of the project, right after the completion of site survey milestone (M1).
- 13. Maximum Penalty cap for penalty for delay is 10% of Sum, Total B of schedule I of financial bid.

12.3 Project Timelines & Payment Terms for Operation and Maintenance (O&M) phase

The Bidder is required to Operate and Maintain the implemented solution for the entire contract duration.

Sr. No.	Mileston e for O&M	Paymen t Schedul e	Payable Amount	Penalty	Deliverables
	Operation and Maintenance (O&M) bill of SI	Quarterly	components: Quarterly charges derived	Penalty will be applicable as per the SLA and Operations Penalties	 SLA report of the devices by SI through NMS Preventive Maintenance Report Attendance of the Resource deployed for O&M

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Sr. No.		Paymen t Schedul e	Payable Amount	Penalty	Deliverables
			Schedule – II of Opex financial bid * (Unit rate quoted for respective line item of Table – B1 in Schedule – II of Opex financial bid table / 20)		
	Operation and Maintenance (O&M) bill of TSP	Quarterly	All those links / circuits for which FAT is successfully	Penalty will be applicable as per the SLA and Operations Penalties	1. SLA report of the uptime of link / circuit as shared by SI through NMS

- 1. On successful completion of FAT of all locations (all 20% locations from each category surveillance, Wi-Fi) included / considered under implementation milestone M2 (phase 1), Go-Live certificate will be issued for M2 & all assets installed under M2 will go into O&M phase. Bidder will be eligible to claim 100% O&M payment as per formula mentioned in above table for each quarter. This consideration will also apply to remaining 4 implementation milestones M3 (phase 2) to M6 (phase 5). Bidder will have to carry out O&M activities till end of contract. 100% SLA and appropriate penalty will be applicable during O&M period once milestone moves into O&M phase.
- 2. The Bidder shall be paid on a quarterly basis for the operation and maintenance phase of the project.
- 3. Payment will be made after verifying the invoice and supporting documents & deducting all applicable penalties.
- 4. TSP will have to submit recurring charges / bill directly to SCADL as per the terms & conditions of the tripartite agreement every quarter for all those links / circuits for which FAT is successfully completed for respective junction / location. Before making a payment to TSP, SCADL will inform successful bidder to check if any SLA / downtime penalty is attributable to TSP. Upon joint agreement & consensus of both successful bidder (SI) & TSP on SLA penalty attributable to TSP, SCADL will pay to TSP within one month.
- 5. For O&M billing of any particular quarter for both SI & TSP, partial days will be applicable for payment whenever implementation milestone Go-Live (for start of SI's O&M) and FAT of one junction / location (for start of TSP's recurring charges) falls in the same quarter. 90 days in a quarter will be considered for mathematical calculation of pro-rata-based payment for such cases.

12.4 Miscellaneous

a) Currency of payment

All payments shall be made in Indian rupees (INR).

b) Mode of Billing and Payments

- i. The Bidder shall submit the proforma invoice along with the actual work undertaken against the respective milestone / time period.
- ii. If the progress is not satisfactory and according to the agreed work program/schedule the payment may be withheld until such times the Bidder rectifies the required shortfall.
- iii. The Bidders shall thereupon promptly make any necessary corrections, and upon completion of such correction, the foregoing process shall be repeated.

All payments under this contract shall be made to the accounts of the Bidders with the Bidders Banker.

c) Suspension of payments

SCADL may at any time during the term of the Contract, issue a written notice of suspension and suspend all payments to the qualified Bidder under the Contract, if the qualified Bidder fails to perform any or all of their obligations under this Contract. The SCADL shall, prior to the suspension of the payments, request the qualified Bidder to remedy such failure within a period of 15 days from the date of issue of such notice of suspension. The notice of suspension shall specify the nature of the failure. In the event the Bidder does not rectify the failure within the specified time prescribed, the SCADL/AMC may have the right to terminate the Contract.

12.5 Commercial Bid Format-Part A

Bidder is requested to add one section in their technical bid containing any additional items that may be required to execute the task defied in the RFP; However, the cost pertaining to the same shall have to be considered in the below financial bid only by the Bidder. No additional cost shall be given to the Bidder under any circumstances whatsoever.

This is a Turnkey kind of project. Wherein, bidder is required to propose an appropriate solution to meet the outcome envisaged. However, Bidder is responsible for any other components inadvertently missed out but it is required as per the proposed solution of the bidder and is essential for overall solution to successfully run during entire project duration than bidder has to consider the same in his proposed solution. Purchaser will not be liable for payment of any additional cost outside of financial bid.

Capital Expenditure (CAPEX)

Table: I

Sr. No.	Description	Uo M	Quanti ty (No.)	Unit Price with 5 year of Warranty (INR, excluding tax)	Total Amount with 5 year of Warranty (INR, excluding tax)	Taxes and Duties (As applicable) in %
	(A)	(B)	(C)	(D)	(E=C*D)	(F)
Schedule-I			<u>'</u>			
	frastructure: For Commar	nd Con	trol Cent	re		
1	SITC of Storage Capacity-(For Application-Capacity-5 TB)	No.	1			
2	SITC of SAN Switch along with all necessary SFP with port licenses and other required accessories for DC Infra	No.	2			
3	SITC of 3 PB NAS Storage along with all required Hardware, software with scalable solution for future expansion as per quantity variation clause	No.	1			
4	SITC of DC server including OS, DB, software licenses virtualization platform etc along with Compute power of minimum 2800 cores (physical cores) with scalable solution for future expansion as per quantity variation clause	Lum psu m	1			
5	SITC of DC Core Router along with Line Card,SFPs and Port Licenses	No.	2			
6	SITC of 48*10G port L3 Core Switch along with all necessary SFP, Port Licenses	No.	2			
7	SITC of 48*10G Port L2 Network Switch along with all necessary SFP, Port Licenses	No.	4			
8	SITC of 48 Port L2 Switch with 10/100/1000BaseT ports with all necessary SFP, Port Licenses	No.	2			
9	SITC of UTM along with all necessary SFP, Port Licenses	Nos.	2			
10	SITC of Internet Router with Line Card, SFPs and Port Licenses	Nos.	2			

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Sr. No.	Description	Uo M	Quanti ty (No.)	Unit Price with 5 year of Warranty (INR, excluding tax)	Total Amount with 5 year of Warranty (INR, excluding tax)	Taxes and Duties (As applicable) in %
11	42U Network Rack	Nos.	2			
12	42U Server Rack	Nos.	5			
13	SITC of Online 100 KVA UPS with 4 hours of battery backup at ICCC	Nos.	1			
14	SITC of Data Center as per SOW mentioned in the RFP	Lum psu m	1			
15	SITC of 10Tr PAC in the Data Centre Server farm area	Nos.	2			
	Total A					
-	structure: End Point Items	5				
B1) Supply of	felements	ı	T	T	<u> </u>	
1.	Gantry	Nos.	56			
2.	Galvanized Cantilever with earthing	Nos.	504			
3⋅	Poles including mounting/installation	Nos.	280			
4.	IP Camera (Type A): RLVD with 8 MP with required license	Nos.	560			
5.	IP Camera (Type A): ANPR, Speed detection with External IR with required license	Nos.	1120			
6.	IP Camera Type C: PTZ with required license	Nos.	140			
7.	IP Camera Type B: Surveillance with External IR with required license	Nos.	140			
8.	Junction box with Adjustable mounting tray along with Voltage stabilizers, Surge Protection Power strip and other associated components	Nos.	140			
9.	Outdoor Industrial grade 8 port POE+ network switch with minimum 2 Nos. of 1G compatible SFP	Nos.	280			
10.	Indoor Industrial grade 8 port POE+ network switch with minimum 2 Nos. of 1G compatible SFP for Wi-Fi locations	Nos.	85			

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					Total	
Sr. No.	Description	Uo M	Quanti ty (No.)	Unit Price with 5 year of Warranty (INR, excluding tax)	Amount with 5 year of Warranty (INR, excluding tax)	Taxes and Duties (As applicable) in %
11.	WIFI Access Point & required accessories for installation	Nos.	300			
12.	6U Rack along with Surge Protection Power strip and other associated components	Nos.	50			
	Total B1					
B2) Installat	ion, testing & commission	ing (IT	C) of ele	ments		
1.	Gantry	Nos.	56			
2.	Galvanized Cantilever with earthing	Nos.	504			
3.	Poles including mounting/installation	Nos.	280			
4.	IP Camera (Type A): RLVD with 8 MP with required license	Nos.	560			
5.	Camera (Type A): ANPR, Speed detection with External IR with required license	Nos.	1120			
6.	IP Camera Type C: PTZ with required license	Nos.	140			
7.	IP Camera Type B: Surveillance with External IR with required license	Nos.	140			
8.	Junction box with Adjustable mounting tray along with Voltage stabilizers, Surge Protection Power strip and other associated components	Nos.	140			
9.	Outdoor Industrial grade 8 port POE+ network switch with 4 Nos. of 1G compatible SFP	Nos.	280			
10.	Indoor Industrial grade 8 port POE+ network switch with 4 Nos. of 1G compatible SFP	Nos.	85			
11.	WIFI Access Point & required accessories for installation	Nos.	300			
12.	6U Rack along with Surge Protection Power strip and other associated components	Nos.	50			
Total B2						
B3) SITC of s	software applications					
1	SITC of virtual controller for Wi-Fi with required OS & DB along with required licenses to	Nos.	1			
<u></u>	1 along min required needses to			<u> </u>	I	<u> </u>

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Sr. No.	Description	Uo M	Quanti ty (No.)	Unit Price with 5 year of Warranty (INR, excluding tax)	Total Amount with 5 year of Warranty (INR, excluding tax)	Taxes and Duties (As applicable) in %
	integrate all Wi-Fi APs installed under this contract as well as future expansion as per quantity variation clause					
	Total B3					
	Total B = B1+B	2+B3				
C) Network (Connectivity (bandwidth as	s a ser	vice mod	el)		
Sr. No.	Bandwidth	UoM	No. of circuits	One Time Charge (OTC) (INR excluding tax)	Total Amount (INR excluding tax)	Taxes and duties (As applicable) in %
1	OTC charge for provisioning of P2P/L2VPN 10 Mbps Connectivity from ICCC, Paldi to field location	Nos.	10			
2	OTC charge for provisioning of P2P/L2VPN 20 Mbps Connectivity from ICCC, Paldi to field location	Nos.	10			
3	OTC charge for provisioning of P2P/L2VPN 30 Mbps Connectivity from ICCC, Paldi to field location	Nos.	20			
4	OTC charge for provisioning of P2P/L2VPN 40 Mbps Connectivity from ICCC, Paldi to field location	Nos.	10			
5	OTC charge for provisioning of P2P/L2VPN 50 Mbps Connectivity from ICCC, Paldi to field location	Nos.	30			
6	OTC charge for provisioning of P2P/L2VPN 70 Mbps Connectivity from ICCC, Paldi to field location	Nos.	50			
7	OTC charge for provisioning of P2P/L2VPN 100 Mbps Connectivity from ICCC, Paldi to field location	Nos.	20			
8	OTC charge for provisioning of P2P/L2VPN 500 Mbps Connectivity from ICCC, Paldi to field location	Nos.	3			
9	OTC charge for provisioning of P2P/L2VPN 1 Gbps	Nos.	3			

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Sr. No.	Description	Uo M	Quanti ty (No.)	Unit Price with 5 year of Warranty (INR, excluding tax)	Total Amount with 5 year of Warranty (INR, excluding tax)	Taxes and Duties (As applicable) in %
	Connectivity from ICCC, Paldi to field location					
10	OTC charge for provisioning of P2P/L2VPN 10 Gbps Connectivity from ICCC, Paldi to New CP office,Shahibaug	Nos.	1			
10	OTC charge for provisioning of 1 Gbps ILL link	Nos.	1			
11	OTC charge for provisioning of 5 Gbps ILL link	Nos.	1			
	Total C					
D) Removal a	nd Re-installation of item	S				
1	Rate for dismantling of CCTV Camera includes supporting accessories (Active/Passive)	Nos.	50			
2	Rate for reinstalling of CCTV Camera includes supporting accessories (Active/Passive)	Nos.	50			
3	Rate for dismantling Pole /Cantilever including all accessories, civil work, labor work, foundation removal, related work like cabling, earthing, etc.	Nos.	50			
4	Rate for reinstalling Pole/cantiliver including all accessories civil work, labor work, foundation, related work like cabling, earthing, etc.	Nos.	50			
5	Rate for dismantling Gantry including all accessories, civil work, labor work, foundation removal, related work like cabling, earthing, etc.	Nos.	50			
6	Rate for reinstalling Gantry including all accessories, civil work, labor work, foundation removal, related work like cabling, earthing, etc.	Nos.	50			
7	Rate for dismantling Junction Box (with all components inside the Junction Box) including civil work, labor work, foundation removal,	Nos.	50			

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Sr. No.	Description	Uo M	Quanti ty (No.)	Unit Price with 5 year of Warranty (INR, excluding tax)	Total Amount with 5 year of Warranty (INR, excluding tax)	Taxes and Duties (As applicable) in %
	related work like cabling, earthing, etc.					
8	Rate for reinstalling Junction Box (with all components inside the Junction Box) including civil work, labor work, foundation, related work like cabling, earthing, etc.	Nos.	50			
	To					
	Ao= Total A+ Total					

Operational and Maintenance Expenditure (OPEX)

The total operations and maintenance cost (OPEX) for one year (sum of B1 + B3) in Schedule-II of below table should be greater than or equal to 10% of the Capex Project Value (Sum of A+B) of Schedule -I. If it is less than 10%, the bid will be rejected.

Sr. No.	Description	UoM	Quantit y (No.)	Unit Price for O&M of One years (INR, excluding tax)	Total Amount for O&M of One years (INR, excludin g tax)	Taxes and Duties (As applicable) in %
	(A)	(B)	(C)	(D)	(E=C*D)	(F)
Sch	edule-II					
B1:	Operational Expenditure (OPI	EX)				
1.	IP Camera (Type A): RLVD with 8 MP with required license	Nos.	560			
2.	IP Camera (Type A): ANPR, Speed detection with External IR with required license	Nos.	1120			
3.	IP Camera Type C: PTZ with required license	Nos.	140			
4.	IP Camera Type B: Surveillance with External IR with required license	Nos.	140			
5.	Junction box with Adjustable mounting tray along with Voltage stabilizers, Surge Protection Power	Nos.	140			

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Sr. No.	Description	UoM	Quantit y (No.)	Unit Price for O&M of One years (INR, excluding tax)	Total Amount for O&M of One years (INR, excludin g tax)	Taxes and Duties (As applicable) in %		
	strip and other associated components							
6.	Outdoor Industrial grade 8 port POE+ network switch with 4 Nos. of 1G compatible SFP	Nos.	280					
7.	Indoor Industrial grade 8 port POE+ network switch with 4 Nos. of 1G compatible SFP	Nos.	85					
8.	WIFI Access Point & required accessories for installation	Nos.	300					
9.	6U Rack along with Surge Protection Power strip and other associated components	Nos.	50					
	Total O&M cost for One years – B1							
B2:	Operational Expenditure (OP)	EX)- Netw	ork Conn	ectivity (bar	ndwidth as	a service		
mod			1					
1	Recurring charge for P2P/L2VPN 10Mbps Connectivity from ICCC, Paldi to field location	Nos.	10					
2	Recurring charge for provisioning of P2P/L2VPN 20 Mbps Connectivity from ICCC, Paldi to field location	Nos.	10					
3	Recurring charge for provisioning of P2P/L2VPN 30 Mbps Connectivity from ICCC, Paldi to field location	Nos.	20					
4	Recurring charge for provisioning of P2P/L2VPN 40 Mbps Connectivity from ICCC, Paldi to field location	Nos.	10					
5	Recurring charge for provisioning of P2P/L2VPN 50 Mbps Connectivity from ICCC, Paldi to field location	Nos.	30					
6	Recurring charge for provisioning of P2P/L2VPN 70 Mbps Connectivity from ICCC, Paldi to field location	Nos.	50					
7	Recurring charge for provisioning of P2P/L2VPN 100 Mbps Connectivity from ICCC, Paldi to field location	Nos.	20					
8	Recurring charge for provisioning of P2P/L2VPN 500 Mbps	Nos.	3					

Sr. No.	Description	UoM	Quantit y (No.)	Unit Price for O&M of One years (INR, excluding tax)	Total Amount for O&M of One years (INR, excludin g tax)	Taxes and Duties (As applicable) in %
	Connectivity from ICCC, Paldi to field location					
9	Recurring charge for provisioning of P2P/L2VPN 1 Gbps Connectivity from ICCC, Paldi to field location	Nos.	3			
10	Recurring charge for provisioning of P2P/L2VPN 10 Gbps Connectivity from ICCC, Paldi to New CP office,Shahibaug	Nos.	1			
11	Recurring charge for provisioning of 1 Gbps ILL link	Nos.	1			
12	Recurring charge for provisioning of 5 Gbps ILL link	Nos.	1			
	Total O&M cost for One y					
B3:	Operational Expenditure (OP	EX)- Data	Center Eq	uipment		
1	Successful O&M of all the Data Centers and its components (including IT & Non-IT equipment, software and other elements, AMC and Comprehensive warranty to achieve desired SLA / uptime to comply all the terms & conditions of this RFP	Lumpsum	1			
	Total O&M cost for One y					
	Bo= Total B1+ Total B2	+ Total B3	3			

Commercial Bid Summary

Schedule-III

Sr.No.	Commercial Bid Summary	Total Cost (Excluding GST) (INR)	Total Cost (Including GST) (INR)
1	CAPEX(Ao)		
2	OPEX (Bo) (OPEX of One years)		
3	OPEX (Total OPEX of Five years)		
	Co= Total Project Cost (INR) (CAPEX+ OPEX- 5 year)		
	Total Project Cost In words		

Note: The quoted rate for all OPEX line items for one year will be applicable for all the years throughout the entire contract period. In the event that both parties agree to extend the contract, the established rate will continue to apply for the 6th and 7th years.

Note for financial bid:

- 1. All the above-mentioned line items should comply to technical specifications and Scope of work including all applicable Licenses, Active and passive Cabling and Accessories, Installation, Commissioning and Configuration with AMC, Warranty and onsite Support during entire contract duration.
- 2. Above mentioned quantities are indicative and for evaluation purpose only, actual quantities may vary. Purchaser will give the order as per the actual requirement at the time of the placing order.
- 3. The quantities mentioned in the financial bill are based on the current assessment. However, at the time of implementation actual/available qty. will be considered. Payment will be made based on the actual quantities executed, in accordance with the rates specified in the financial bid of this RFP.
- 4. Bidder needs to upload detailed priced BOQ and pricing of all the line items.
- 5. Bidder should provide all prices as per the prescribed format under this Annexure. Bidder should not leave any field blank.
- 6. The Bidder needs to account for all Out-of-Pocket expenses due to Boarding, Lodging and other related items. No additional/separate payment shall be made regarding the same.
- 7. The bidder shall refer quantity variation clause in section 19.25.
- 8. The rate mentioned for Dismantling and Reinstalling Charges shall be valid for the entire contract duration. The above-mentioned quantity are indicative. In the future, if the request for Dismantling and Shifting goes beyond the indicative quantity the bidder is bound to perform Dismantling and Reinstallation activities at the mentioned rate in financial bid under this RFP for the entire contract period. Please note that such cost should be inclusive of all the allied activities and no additional cost shall be given to the Bidder for this activity.
- 9. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for.
- 10. Smart City Ahmedabad Development Limited reserves the right to ask the SI to submit proof of payment against any of the taxes, duties, levies indicated.
- 11. If in case during the tenure of the project, GST bracket is changed, as per the Govt. norms, corresponding effect shall be extended in the consequent billing of the successful Bidder. (e.g., If the GST bracket is reduced from 18% to 12%, further pending amount shall be paid at 12% GST rate on their base rate and same applies vice versa as well). Please note that Bidder shall have to submit requisite documentary evidence against the same.
- 12. The Contract Price shall be firm and not subject to any alteration. No escalations of prices will be considered under any circumstances.
- 13. The rate/cost quoted for this project may be considered for additional procurement/payment in future.
- 14. Wherever present, the items mentioned as Lump Sum will have quantity as One (1) in the BoQ, the Bidder should consider the same as Lump Sum and submit the commercials as a wholesome package against the requirement under this project.
- 15. No additional cost other than the cost quoted under various items shall be given to the Bidder for the execution of the project. Bidder may factor any other cost associated with the project in their commercial bid. No claim pertaining to the any other cost shall be entertained by SCADL during the entire contractual duration.

12. Service Level Agreement & Penalties

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

SLA defines the terms of the successful bidder's responsibility in ensuring the performance of the network based on the agreed performance indicators as detailed in the agreement. Successful bidder has to coordinate with bandwidth service provider and get the complaint closed and also has to produce documentary evidence regarding failure of Bandwidth by ISP/TSP & not by Network equipment's.

Note:

The table below summarizes the performance indicators for the services to be offered by the bidder-

The System Integrator shall co-ordinate with concerned team and get the complaint closed. It shall be SI's responsibility to attend the complaint initially in case of link down and then as per the requirement, the ticket may be transferred to the concerned stakeholder. However, SI must take necessary follow-up to resolve the same in a timely manner. Additionally, the definition mentioned above defined the category of the respective components for the consideration of SLA, however, it shall be including the same but shall not be limited to it only and shall also include all the allied sub- components required as part of the project.

13.1 SLA for Manpower during the Implementation phase

Definition	Bidder is required to propose the CVs of the required Manpower as mentioned in Section 11. It is vital that such manpower is available to SCADL/AMC and performs to the expected levels. The current SLA breach shall specify penalty amount for non-availability of these manpower.
Service Level Requirement	Availability of the required manpower should be 100%. Bidder is required to register the biometrics of all the deployed manpower in the Biometric Attendance System of AMC/SCADL so that the attendance report of each resource proposed as a part of team can be generated on monthly basis by SCADL.
Measurement of Service Level Parameter	 Following instances would be considered as SLA non-compliances: Bidder is required to deploy the resources proposed in the bid within 15 days of receipt of the Work Order issued by SCADL. Presence of any resource will be calculated as per the working days of AMC/SCADL. With reference to the Replacement of a profile by the Bidder, only one replacement per profile, with equal or higher qualification and experience would be permitted in the Implementation phase of the project. Note: Replacement due to reasons not in control of SI (like

	counted in	of the resource, accident, death etc.) would not be the permissible 1 replacement LA non-compliance reported and proved, there shall be a						
	penalty as given below:							
	Member	Penalty						
Penalty for Non- achievement of Man power Requirement	Project Manager	 During the implementation phase leave of 2 days is allowed in a month. For absence of more than 2 days in a month, Penalty of INR 3,000 per day will be levied in case of absence/non- availability. Penalty of INR 1,00,000 will be levied if Project Manager is not deployed for 30 continuous days after commencement of deployment period. 						
	• During to allowed in a month, possess of absolution to the case of a	 During the implementation phase leave of 2 days is allowed in a month. For absence of more than 2 days in a month, penalty of INR 2,000 per day will be levied in case of absence/non-availability. Penalty of INR 50,000 will be levied if Technical Expert is not deployed for 30 days after the commencement of deployment period. 						

13.2 Service Level Agreement for Operation & Maintenance Phase

- During the O&M phase, the individual penalty for the System Integrator (SI) and the Telco Service Provider (TSP) is capped at 10%. This penalty is derived from the sum of B1 and B3 for the SI, and B2 for the TSP, as specified in Schedule-II of the financial bid. If the penalty being levied for unavailability goes above 10% of the quarterly OPEX cost for three consecutive quarters, SCADL may have the right to terminate the contract with the winning Bidder.
- During the O&M phase, if the critical infrastructure is impacted on a repetitive basis and no action being taken to resolve the issue on permanent basis, SCADL reserves the right to invoke the termination clause and forfeit the PBG of an implementation agency.

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Sr. No.	SLA	Target		Penalties				
				SLA	Penalty			
1.				>= 99%	No penalty			
				<99% to >=98.5%	2% of quarterly OPEX cost			
			=	<98.5% to >=98%	3% of quarterly OPEX cost			
	Availability / Uptime of Applications and Software	99% (Avg uptime at each indivisible Application level)	-	<98% to >=97%	4% of quarterly OPEX cost			
	Software			<97%	5% of quarterly OPEX cost			
			Pe fro	enalty shall be derived for schedule II of financi	rom Sum of Total B1 and B3 ial bid.			
				SLA	Penalty			
	Availability / Uptime of			>= 99.95%	No penalty			
	Data Centre Elements (Network, Servers, Storage, UPS etc.)						<99.95% to >=99.50%	1% of quarterly OPEX cost
2.	Storage, OTS etc.)	99.95% (Avg uptime		<99.50% to >=99%	2% of quarterly OPEX cost			
		at each indivisible component level)	at each	<99%	5% of quarterly OPEX cost			
				enalty shall be derived for schedule II of financi	rom Sum of Total B1 and B3 ial bid.			

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Sr. No.	SLA	Target		Penalties			
				SLA	Penalty		
				>= 99.50%	No penalty		
	Availability / Uptime of	99.50%		<99.50% to >=99%	2% of quarterly OPEX cost		
3.	3. (Cameras/Network	(Avg uptime at each indivisible		<99% to >=98%	5% of quarterly OPEX cost		
	Point)	component level for SI		<98% to >=97%	8 % of quarterly OPEX cost		
	Availability / Uptime of Lease line/ILL link	and Avg Up time of all		<97%	10 % of quarterly OPEX cost		
		Link Availability for Telco)		Link Availability for Telco)		all be calculated based on Schedule II of the finance penalty for the TSP (Terived from the sum of Tenancial bid.	om Integrator's (SI) downtime on the sum of Total B1 and B3 ancial bid. Elecom Service provider) will be otal B2 from Schedule II of the otal mat no.3 in note for calculating
4.	Preventive Maintenance (PM) activity	Once in a quarter (at least)	If the Bidder fails to carry out Preventive Maintenance (PM) of any device / system, penalty of 5% shall be deducted from the quarterly payout. Penalty shall be derived from Sum of Total B1 and B3				
	Not keeping required Manpower	As per SLA	•	 Availability of the required manpower during O&M phase is the responsibility of the Bidder. All the deployed resources are required to register in the Biometric Attendance System of AMC/SCADL so that the attendance report of each resource proposed as a part of team can be generated on monthly basis by SCADL. With reference to the Replacement of a profile by the Bidder during O&M phase, only one replacement per profile, with equal or higher qualification and experience would be permitted in O&M phase of the project. Note: Replacement due to reasons not in control of SI (like resignation of the resource, accident, death etc.) would not be counted in the permissible 1 replacement. 			

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Sr. No.	SLA	Target	Penalties		
			For every SLA non-compliance reported an proved during O&M phase, there shall be a penalt as given below: Penalty shall be derived from Sum of Total B1 from schedule II of financial bid		
			Team Member	Penalty	
			Project Manager	During the O&M phase leave of 2 days is allowed in a month. For absence of more than 2 days in a month, Penalty of INR 3,000 per day will be levied in case of absence/non-availability. Penalty of INR 1,00,000 will be levied if Project Manager is not available for 30 continuous days after commencement of O&M period.	
			Technical Experts	 During the O&M phase leave of 2 days is allowed in a month. For absence of more than 2 days in a month, penalty of INR 2,000 per day will be levied in case of absence/non-availability. Penalty of INR 50,000 will be levied if Technical Expert is not deployed for 30 days after the commencement of O&M period. 	
			Other resources/ Engineers	During the O&M phase leave of 2 days is allowed in a month. For absence of more than 2 days in a month, Penalty of INR 1,000 per day will be levied in case of absence/unavailability of resource.	

Note:

- 1. Uptime % will be the % for which the selected bidder (SI) is solely responsible.
- 2. For calculating SLA of Sr.3 of above table, SI will have to clearly define the detailed process of bifurcating total downtime of any device into different buckets of various stakeholders with evidence.

- I. For ex.: if any camera/end point device remains unreachable through NMS for total 60 hours in a quarter, it could remain unreachable due to issue in P2P / L2VPN links for let say 30 hours for which TSP (Telecom Service Provider) will be responsible. Penalties for 30 min downtime shall be applied to the TSP's quarterly bill in accordance with the SLA mentioned in Sr.3 of the above table.
- II. It could remain unreachable due to faulty hardware / any other issue related to hardware or its firmware / issue related to EMS (Element Management System) or NMS (Network Monitoring System) / issue related to fault in power cable or CAT cable or any patch cord etc. for 20 hours for which selected SI will be responsible and penalties shall be applied to the SI's quarterly bill derived from Sum of Total B1 from schedule II of financial bid for 20 hours downtime.
- III. It could remain unreachable due to raw power failure for 10 hours for which SCADL will be indirectly responsible.
- IV. Devices put under maintenance category (for ex.: devices going to remain down / unreachable for long time due to various field construction activities like metro train work / over bridge construction work / road expansion or resurfacing work etc. only if approved by SCADL on case-to-case basis) will be excluded from SLA calculation.
- 3. For calculating SLA of Sr.3 of above table for Telecom service provider, System Integrator (SI) is required to monitor, report, and ensure the uptime and downtime of all P2P/L2VPN links. For Non achieving SLA, Penalty shall be applied to TSP's quarterly OPEX bill derived from Sum of Total B2 from schedule II of financial bid.

Requirements:

- The SI shall submit quarterly SLA reports detailing the uptime and downtime statistics of all P2P/L2VPN links.
- Reports shall include the exact start and end times of any downtime incidents, along with the duration and cause of each downtime occurrence.
- The formula for calculating network availability is as follows: Network Availability (%)= (Total Uptime / Total Up time + Total Downtime)×100

Scenario:Total Time=3 months×30 days/month×24 hours/day×60 minutes/hour (assume each month has 30 days)
Total Time=129,600 minutes

Recorded Downtime: Let's say the recorded downtime for P2P/L2VPN links over the quarter is 1,440 minutes.

Calculation:

1. Total Uptime:

Total Uptime=Total Time-Total Downtime Total Uptime=129,600 minutes-1,440 minutes Total Uptime=128,160 minutes

- 2. Network Availability Percentage:
 Network Availability (%)=(128160/129600)×100 = 98.89%
- 4. In addition to the above-mentioned penalties, a one-time penalty of up to Rs. 1 Lac / instance will be levied in case if video footage of any event is not available.
- 5. In addition to the penalties mentioned above, a penalty of Rs. 3 lakh per year will be imposed if the bidder fails to conduct an annual cybersecurity assessment, including Vulnerability Assessment and Penetration Testing (VAPT), through a CERT-IN certified agency.
- 6. SI will have to submit reports from NMS application in pdf and excel / csv formats.
- 7. NMS will be a single source to calculate SLA data..

PART: B-SITC of Dashcams and operates Drones

14.Scope of Work

SCADL/ AMC envisions to identify and monitor its municipal infrastructure for quick action through deployment of dashcams and drones . The successful bidder will be responsible for supply, installation, testing and Commissioning of dashcams across AMTS, BRTS (Bus Rapid Transit Systems), public transportation, and Municipal corporation vehicles. The Scope of work for this Part-B is categorized into following

- 1. SITC of Dashcams
- 2. Operates Drones' flying

14.1 SITC of Dashcams

The successful bidder will be responsible for installing dashcams across AMTS, BRTS (Bus Rapid Transit Systems), public transportation, and corporation vehicles The dashcam shall be equipped with inbuilt AI capabilities to automatically capture events and issues occurring on city roads while the vehicle is moving on the city roads. However, the AI analytics solution and application are not in the bidder's scope.

- 1. The successful bidder will be responsible for supply, installation, testing, commissioning, and maintenance of all dashcams that are to be deployed as per this RFP for the entire contract duration period.
- 2. The dashcam should have built-in AI capabilities to process real-time video feeds and identify specific events or use cases, images and videos of vehicles and their license plates. The primary processing will occur at the edge location only. Alerts, images, and event-specific video clips will be transferred to the Integrated Command and Control Center (ICCC) in Paldi. The bidder is required to procure dashcams with these fundamental functionalities.
- 3. The dashcam should be capable of capturing high-quality images and videos and should be capable to capture the video feeds at a lower FPS.
- 4. The AI Application/Video analytics solution is not in bidder's scope but requirement of necessary hardware/dahscam procurement will be in the scope of bidder.
- 5. In the future, Dashcam installed in this RFP will require the generation of events/ e-challans for the traffic violation and municipality use cases. To ensure the system operates smoothly with

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- these newly installed dashcam, the bidder shall have to procure all necessary equipment to run the solution as per the requirement of the RFP documents.
- 6. **Sim Cards compatibility:** The dashcams shall be equipped with SIM card compatibility, allowing for the insertion of SIM cards. The bidder will supply the SIM cards at the time of deployment. It is the bidder's responsibility to select and purchase a data plan for the SIM card from the telecom service provider, in order to ensure that video feeds of the events/use cases are transmitting on the ICCC, Data center without any interruption.
- 7. Bidder will have to pay for the SIM card registration cost & plan cost. The SIM card to be registered under SCADL/AMC's name, and the selected bidder will be required to pay monthly/quarterly/yearly plan cost to the service provider.
- 8. Dashcam must have facility to record minimum 7 days recording on memory card installed in it. no continuous recording required at control room. After 7 days, the video-image feeds would be overwritten unless it is flagged or marked by the SCADL / Police /AMC for investigation or any other purpose.
- 9. SCADL has considered storage requirement of municipalities and police use cases generated from dashcam in Part A of the RFP which include five photos (Event Snap) and a 10-second video clip (Event Clip) for each violation and to be stored in the data center for 90 days.
- 10. The dashcams installed to have anti-tampering and anti-theft design.
- 11. The dashcams should be installed with protective covers to avoid against physical damage, to protect against anti-theft and unauthorized access.
- 12. The SI shall liaise with the electric staff of the concerned departments for integration of power connections for the dashcams across transportation vehicles. If the power output of the transportation vehicle exceeds the power requirement of the dashcam, then the bidder shall be responsible for arranging appropriate power adjustment or regulation mechanisms to ensure compatibility.
- 13. The vendor shall furnish all required power cables and accessories (3- pin power socket, car charger etc.) essential for powering the dashcams. These accessories shall be compliant with relevant safety and quality standards.
- 14. SI shall coordinate with concerned authorities / municipalities /Bus drivers for installation of Dashcams.
- 15. The successful bidder is expected to coordinate with authorities for necessary permissions, approvals, and follow-ups for the installation of dashcam devices in the respective public transport vehicles. However, AMC will provide adequate assistance/support as and when required.
- 16. The successful bidder to ensure that no damage occurs to the property of Ahmedabad municipal corporation/ public transport vehicles/Police department vehicles during or post installation of the dashcams. If any damage occurs the concerned charges will be recovered from the bidder.
- 17. The ownership of all hardware procured as part of the project and related documentation for the project would always lie with the AMC/SSCDL. All licenses for software procured related to project have to be in the name of AMC/SCADL. The bidder will be required to provide the warranty and other documents from the respective OEMs clearly mentioning the product name, quantity, duration, type of support, etc.

14.2 Event Generation through Drones' flying

The successful bidder will have to operate drones capable of flying over designated city roads to capture data related to city infrastructure, events, and issues. The bidder shall have sufficient accessories at the time of fly to make sure for continuous recording of minimum 30-45 minutes will be done.

The solution should cover a range of aspects, including but not limited to:

- 1. The successful bidder needs to fly drone and cover certain Kms during this contract period as mentioned in this RFP.
- 2. The kilometers operated by the drone and covered by drone in air will be considered as Kms covered.
- 3. Drone shall be capable of capturing the objects clearly with high resolution image and videos.
- 4. During the Video recording the data should be clear & sharp in HD video format in daytime.
- 5. The video should have Date, Time and Coordinates stamping and one should be able to view the recorded video through YouTube/or any open-source link.
- 6. **Sim Cards compatibility:** The drones shall be equipped with SIM card compatibility, allowing for the insertion of SIM cards. The bidder will supply the SIM cards at the time of deployment.
- 7. The successful bidder should be able to show live drone footage when it is operating on a particular route, upon request from SCADL.
- 8. The route, roads, number of kilometers to be covered at a particular point along which the drone needs to be operated will be decided by SCADL /AMC/Police authorities before the flight of the drone.
- 9. SCADL will provide designated stretches of roads and KML files to the bidder to record the video footage required to identify events.
- 10. The bidder shall ensure that deployment of drones equipped with high-definition cameras and memory card slots for video storage.
- 11. The Collection and storage of video footage on memory cards shall be used for further analysis and identify events/ use cases using AI-based analytics software. The identification of events generated by drones using AI applications is not within the bidder's responsibilities.
- 12. The successful bidder is expected to seek necessary approvals, permissions from respective government agency for flying of drone and bidder will have to submit the copy of permission taken to SCADL before flying drones.
- 13. The vendor is responsible for ensuring compliance with all legal and regulatory requirements.
- 14. In case of any accident occurs during/before/after the flight of drone, the bidder should indemnify SCADL/AMC/Police department and should bear the necessary charges/consequences.

14.3 Manpower

The successful Bidder shall depute the resources as per requirements for carrying out the implementation activities as well as O&M Activities and maintaining the SLA.

It is up to selected bidder to plan number of field manpower / teams to fulfill all the terms & conditions of the RFP.

The field manpower deployed for the project should be without any criminal background / record. The successful Bidder must submit declaration certificate of all deployed manpower to SCADL before deputation in this regard.

14.4 Technical Specification of Dashcam

Sr. No	Parameter	Specification	Complianc e (Yes/No)	Reference
1	Video Capture Resolution	Resolution: 1920x1080 @ 30 f/s or better		
2	Lens	Fixed Lens: 110° FOV or better		
3	System on Chip (SOC)	High capacity edge processor to enable concurrent neural networks for real-time artificial intelligence		
4	CPU	Quadcore CPU or better		
5	GPU	Image Processing Capable		
6	RAM	2GB DDR3 or higher		
7	HDR	HDR Compatible		
8	AI Capability	Yes		
9	Ports	1 x Micro-USB for power and data transfer 1 x microSD slot 1 x SIM card slot		
10	Connectivity	1) 4G /LTE supported for real-time data upload and remote access 2) Wi-Fi 802.11 b/g/n for local connectivity 3) Bluetooth 4.2 for pairing with mobile device		
11	Mounting	Adhesive mount		
12	Power Supply	5-10V DC(USB)		
13	Operating Temperature	o to 55°C (temperature)		
14	GPS	Yes		
15	Orientation	Front and Inside		

Sr. No	Parameter	Specification	Complianc e (Yes/No)	Reference
	SD Card (MicroSD) for Local Storage	Micro SD Card, minimum 256 GB - local recordings for storage of video feed for atleast 7 days. (1 Nos. of card to be provided with each Dashcam)		
17	Loop recording	video record with automatically overwrited		
18	Software	Operating System: Custom Linux-based OS or Android		
19	Compliance and Certifications	CE, FCC, RoHS		
20	Warranty	5 years		
21	Additional Features	Night Vision feature which can detect event in Low light		
22	Specify the proposed Make			
23	Specify the proposed Model No			

15. Service Level Agreement (SLA) & Penalties

15.1 Implementation phase SLA for Dashcams

Sr. No.	Milestone Description	Timeline	Penalty for Delay	Documents to be Submitted/Shared
1	Work Order/LoI shared by SCADL	То		To be released to Selected Bidder by SCADL
2	Supply, Installation, Testing & Commissioning of required Hardware (Dashcams) and make it functional as per SoW of RFP.	T1 = Repeat work order issued + 3 months	A penalty of INR 5,000 for every week or part thereof of delay for SITC of dashcam SCADL will have right to terminate the contract and forfeit the PBG beyond delay of Repeat work order issued + 5 months.	(Including anti-theft cover), vehicle numbers in which dashcam installed, Installation dates, SIM card activation with data plan.

Note for clause – Implementation phase SLA for Dashcam:

- 1. SCADL will issue repeat work order in denominations of 250 dashcam installations to the bidder till the completion of 1000 dashcams.
- 2. SCADL will issue a repeat work order for the supply, installation, testing, and commissioning (SITC) of an additional 250 dashcams only after the completion of the T2 milestone. The bidder will supply the dashcams only upon receipt of the repeat order. If the bidder supplies dashcams without receiving a repeat order (RO) from SCADL, SCADL will not make any payment for the supplied quantity. This shall apply to all repeat work orders.
- 3. Operation and maintenance activities will begin immediately on day-1 after the completion of the Supply, Installation, Testing, and Commissioning (SITC) of the dashcam. So, the payment for the implementation milestone will be made after deducting any applicable penalties of the implementation phase and Service Level Agreement (SLA) penalty of O&M phase.
- 4. The maximum penalty for this section will be 10% Repeat order value which is derived from Sr.1 and Sr.2 of table X of financial bid format mentioned in Section 18. SCADL will have a right to terminate the contract upon total penalty of this section crossing the maximum ceiling.
- 5. Penalties shall be levied only for the reasons attributable to the implementing bidder. Any risks/issues foreseen by the implementing bidder shall be brought to the notice of the SCADL immediately. If no such issues/risks are highlighted by the implementing bidder, then it is expected that no delays will be there in the implementation schedule. For Example, If 250 dashcam devices installation RO received from SCADL on 1st May,2024. All 250 dashcam devices need to install in 3-month duration i.e on or before 30th July,2024. However, due to user department permission issue for installation of dashcam in vehicles, 10 no. of dashcam not installed due to some permission issue by the department for 2 weeks (from 1st July ,2024 to 15th July,2024) and Installation & integration of Dashcams completed in vehicles on 20th Aug,2024. So, vendor will be penalized for one week i.e. Rs 5000/giving exclusion of 2 weeks of Permission issues.

6. Bidder at any point of SITC, should not change the technical specifications of Dashcam as mentioned in this RFP, unless it is intimated and approved by SCADL.

15.2 Implementation phase SLA for Drone

Sr. No.	Milestone Description	Timeline	Penalty for Delay	Documents to be Submitted
1	Operates drone and functioning as per SoW of RFP	T1= Letter/Mail received from SCADL for drone flight + 3 days	A penalty of INR 1000 for every day of delay or part thereof if the drone does not have a fly within 3 days.	 Reports consisting of relevant images, drone operated area along with Lat/long in KML/KMZ format, number of Kms, duration.

Note for clause - Implementation phase SLA for Drone:

- 1. The successful bidder is required to operate drone as per timeline mentioned in Sr.no 1 of above table every time post issuance of letter/Mail by SCADL for operation of drone.
- 2. Payment to the bidder will be based on the number of kilometers flown by the drone. As a result, the bidder will have to submit report that displays drone flying kilometers along with lat/long and video footage as per SOW mentioned in RFP. The payment will only be made based on actual number of kilometers that the drone is operated in air.
- 3. There will be no consideration for payment in any other format. For example, manual data entry in Excel sheet cannot be taken into account for payment.

16. Operation & Maintenance

The operation and maintenance activities shall commence on day-1 following the completion of Supply, Installation, Testing, and Commissioning (SITC) of the dashcam. Throughout the duration of the operation and maintenance period, the implementing bidder is obligated to maintain the technology and performance levels of the installed system above the specified benchmarks as outlined in this RFP. The implementing bidder shall be responsible for the uptime and performance are measurable and can be consistently monitored.

During the contract period as per this RFP, the below penalties will be applicable.

Table-I

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Type of Issue	Resolution time (from the time of reporting of incident in the system)	Penalty	Basis for measurement
Hardware /Dashcam breakdown	Not resolved after the first 24 hours	Rs. 500/- (for every 24 hour or part thereof per dashcam)	The measurement of the service availability of dashcam through alert generated in NMS and it is not resolved beyond 24 hours. Uptime and availability of the dashcam during vehicles operation hours only
Video feed Backup is not maintained of minimum 7 days		Rs. 1000/- per day per dashcam	A penalty of INR 1000 per dashcam per day will be imposed for each full day of missing video feed in VMS. If video feed is missing for half a day or more, it will be considered as a full day of non-compliance, and the penalty of INR 1000 per dashcam per day will apply. For example, The video feed available for 5 days and 2 days feeds are not available then penalty will lies for 2 days as 2*1000 per dashcam.

Note for clause Operation & Maintenance:-

- 1. The maximum penalty for this section will be 10% of the quarterly amount to be paid to bidder in the O&M phase (Refer Section 17 for Payment terms for O&M phase). SCADL will have a right to terminate the contract upon total penalty of this section crossing 10% in three consecutive quarter.
- 2. The bidder shall have to maintain uptime and availability of the dashcam during vehicles operation hours only. The bidder will have to provide distinguishing between power-off periods and actual hardware failures for calculating SLA of the hardware breakdown issue mentioned in Sr.1 of above Table-I.

Quarterly SLA reports that include:

- Total operational hours of each dashcam.
- Total downtime of each dashcam, distinguishing between power-off periods and actual hardware failures
- 3. If any dashcam has hardware failure on three or more occasions in a quarter, it shall be replaced by equivalent new equipment by the vendor at no cost to SCADL within 7 days from the date of last failure. Till the replacement is provided, the original equipment has to be kept in running condition or else a standby provided, and all services restored. However, penalties for breakdown as per SLAs defined in the tender will be applicable.

17.Payment Terms

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

Payment Milestone	Frequency of Payment	Payment Amount	Payment condition & Documentary Evidence to be submitted
P2 (SITC of Dashcam)	Monthly Bidder can raise invoice at and of each month ashcam) of relevant images anti-theft connumbers, Insta		of relevant images (Including anti-theft cover), vehicle numbers, Installation dates. 2. Report of Device discovered and integrated in VMS and NMS.
P1 (Drone) Section 15.2	Monthly	Monthly invoice Bill value= Unit price of drone flying per kilometer quoted in Sr.3 of Table X of financial bid*total drone flying kilometers	 Reports consisting of relevant images, drone operated area along with Lat/long in KML/KMZ format, number of Kms, duration. Implementation delay related penalties (if any) will be deducted.
Operation and Maintenance (O&M) bill of SI	Quarterly	SCADL will pay sum of balance 20% of all invoices value which was hold in implementation phase in remaining equal quarterly installment.	 Dashcam Hardware/break down report O&M SLA Penalty will be deducted NMS and VMS report

Note for Payment terms:

- 1. The bidder is allowed to raise a maximum of four (4) invoices against each Repeat Order (RO) for the payment associated with the SITC of dashcams. As per implementation milestone, bidder must have to complete SITC of 250 no. of dashcam in 3-month time period post issuance of work order/Repeat order date. For example, the bidder has submitted the first invoice for the SITC of 40 no. dashcams in starting of 2nd month, another 2nd invoice submitted for SITC of 60 no. of dashcam in starting of 3rd month, 3rd invoice submitted for SITC of 100 no. of dashcam in starting of 4th month then the fourth and final invoice for 50. No of dashcam will be raised upon the completion of the remaining quantity which is the total RO quantity of dashcams.
- 2. The RO Completion Date is defined as the date on which the installation and integration of all Repeat Order (RO) quantity of dashcams are completed and reflected in the NMS/VMS system. This date will be determined based on the Network Management System (NMS) and Video Management System

- (VMS) reports, which must show the discovery and integration of the specified 250 dashcams. The date when the final dashcam is successfully integrated and recorded in these reports will be considered the RO Completion Date.
- 3. The bidder is responsible for installing the dashcams in the vehicles as per the issued work order/repeat order. However, there are certain circumstances where the bidder is required legitimate support from SCADL/AMC to proceed for dashcam installation. Legitimate support refers to instances where the TENDERER fails to provide essential resources such as space and necessary clearances that are critical for the installation and integration of dashcam as per the agreement terms. Therefore, Upon completion of four months from the date of the issued work order/repeat order, if the bidder is still unable to install the specified number of dashcams due to delays in support from SCADL/AMC, the following payment conditions will apply:
 - Supply Payment: SCADL/AMC will make a supply payment of that particular RO as per unit rate mentioned in the commercial bid format in Table X in Sr.1.
 - Installation & Integration Payment: SCADL/AMC will make payment of Sr.2 of Table X of commercial bid format upon the successful installation and integration of the dashcams in the vehicles.

For example, 20 dashcams are not installed by the end of the 4th month from the Release Order (RO) issue date due to legitimate support from SCADL/AMC, SCADL will make a payment as per mentioned above.

SCADL shall be released payment only after submitted valid documentations, and after deducting applicable penalties & observations on field if any.

Partial/Full damage to hardware:

- 1. Dashcam equipment installed through this Project would become an important asset. During the contract period of the Project the bidder shall be required to repair / replace any equipment if stolen / damaged/faulty.
- 2. In case of Partial/Full damage or loss of the equipment due to reasons beyond the control like Theft, intentional damage by mishandling, Fire etc., the Bidder should be in a position to supply working standby equipment with same configuration or higher with all services restored without any further cost to SCADL.

18. Commercial Bid Format-Part B

Table X

Sr. No.	Description	UoM	Quantity (No.)	Unit Price for 5 year (INR, excluding tax)	Total Amount for 5 year (INR, excluding tax)	Taxes and Duties (As applicable) in %
	(A)	(B)	(C)	(D)	(E=C*D)	(F)
1	Supply of Dashcam with 5-year warranty	Nos	1000			
2	Installation, Testing, Commissioning, Operation and Maintenance of Dashcams, SIM card with unlimited data Plan, Memory card, anti-theft cover for dashcam	Nos	1000			
Total Cost (X1)						
3	Cost of flying drone	Kms	500			
Total Cost (X2)						
	Total Project Cost X = X1+X2					

Note for Table – X above:

- 1. Price quoted in above table in X will include Successful SITC, O&M for 5 years of Dashcam and operations of drone flying to comply all the terms & conditions of this RFP.
- 2. All the above-mentioned line items should comply to technical specifications and Scope of work including all applicable Licenses, Cabling and Accessories, Supply, Installation, Commissioning and Configuration with Warranty support during entire contract duration.
- 3. Quantities mentioned in above table is only for bid evaluation purpose. Payment to selected SI will be done only for the executed quantities as approved by SCADL
- 4. Above mentioned quantities are indicative and for evaluation purpose only. Payment to selected SI will be done only for the executed quantities as approved by SCADL. The Quoted rates remain valid throughout the project contract period.
- 5. The Bidder needs to account for all Out-of-Pocket expenses due to Boarding, Lodging and other related items. No additional/separate payment shall be made regarding the same.
- 6. Bidder should provide all prices as per the prescribed format under this Annexure. Bidder should not leave any field blank.

- 7. The Contract Price shall be firm and not subject to any alteration. No escalations of prices will be considered under any circumstance.
- 8. The bidder shall refer quantity variation clause in section 19.25.

19. Instructions to the Bidders

Bidders are advised to study all instructions, forms, terms, requirements and other information in the Bid Documents carefully.

- 1. Every page of the proposal should necessarily be numbered and signed with seal.
- 2. The Bidder should not tamper the templates, and file types. If any additional information should be provided in a separate sheet where required.
- 3. 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.
- 4. The response to this Bid Document should be full and complete in all respects. Failure to furnish all information required in the Bid Documents or submission of a proposal not substantially responsive in every respect will be at the Bidder's risk and may result in rejection of its Proposal.
- 5. Additionally, proposals of only those Bidders who satisfy the Conditions of Eligibility, stated herein, will be considered for evaluation by Smart City Ahmedabad Development Limited.
- 6. Any past projects where the Bidder executed other works in addition to what is asked in Pre-Qualification Criteria in a single order, the Bidder should consider only the value of asked project part and highlight only those components.
- 7. SCADL may request Bidder(s) to submit their justification / additional documentary evidence during the evaluation of the bid to ascertain their qualification. However, SCADL may not ask for any justification during the bid evaluation phase at its own discretion.

19.1 Availing RFP Documents

RFP document can be downloaded from the web site (n)Procure (https://www.nprocure.com/) up to the date and time mentioned in the RFP Notice (Section -2).

19.2 Completeness of the RFP Response

Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications. The response to this RFP should be full and complete in all respects. Failure to furnish all information required by the RFP document or submission of a proposal not substantially responsive to the RFP documents in every respect will be at the bidder's risk and may result in rejection of their proposal.

19.3 Tender Fee and Earnest Money Deposit (EMD)

Bidder should submit the tender fee (INR 18,000) in the form of Demand Draft / Banker's Cheque in favor of "Smart City Ahmedabad Development Limited" drawn on any scheduled / nationalized bank and payable at Ahmedabad.

The bidder should also pay EMD of Rs. 2,00,00,000(Two Crores Only) in favour of "Smart City Ahmedabad Development Limited" payable at Ahmedabad in the form of DD of any nationalized bank / scheduled banks with validity of 180 days beyond the original validity period for the bid.

- 1. No interest will be payable by the SCADL on the Earnest Money Deposit (EMD).
- 2. In case bid is submitted without EMD or Bid fees as mentioned above then SCADL reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
- 3. 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.
- 4. 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.
- 5. The decision of SCADL regarding forfeiture of the EMD and rejection of bid shall be final & shall not be called upon question under any circumstances.
- 6. 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.

19.4 Performance Bank Guarantee

The successful Bidder shall at his own expense, deposit with department, within 15 days of the notification of award (done through issuance of the Letter of Intent), an unconditional and irrevocable Performance Bank Guarantee (PBG) from Nationalized or Scheduled Banks except Co-operative Banks in favor of "Smart City Ahmedabad Development Limited" for the due performance and fulfilment of the contract by the Bidder.

The successful bidder who is awarded the Work Order shall be required to deposit a Performance bank guarantee @ 5% of the total 5 year contract value (Zo value of Table Z of Section 20.13) in the form of unconditional Bank Guarantee from any scheduled bank in favor of "Smart City Ahmedabad Development Limited, Ahmedabad (from all Nationalized banks including the Public sector banks - IDBI Ltd. Or Private sector banks - AXIS Bank, ICICI Bank and HDFC Bank) within 15 days of award of work, covering the period of contract and 180 days beyond the contract period. In case, the contract is further extended beyond the initial period, the Bank Guarantee will have to be accordingly extended/renewed by the

successful agency/bidder. All incidental charges whatsoever such as premium, commission etc. with respect to the Bank Guarantee shall be borne by the successful bidder. Non-deposit of PBG within the stipulated time shall render the award of contract invalid at the discretion of SCADL.

The Performance Bank Guarantee letter format can be found in the Section 20.11 of this document.

The Performance Bank Guarantee may be discharged/returned by department upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.

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

In the event of the Bidder being unable to service the contract for whatever reason or receive frequent complaints from Citizens, SCADL would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of SCADL under the Contract in the matter, the proceeds of the PBG shall be payable to SCADL as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. SCADL 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.

19.5 Bid Validity Period

The bid validity period shall be 180 days from the date of submission of bids. In exceptional circumstances, the AMC/SCADL may solicit the Bidder's consent for an extension of the period of bid validity. Any such request by the AMC/SCADL and the response thereto shall be made in writing and such extension of Bid validity period by the Bidder should be unconditional. A Bidder may refuse AMC/SCADL's request for such extension. A Bidder accepting the request of AMC/SCADL shall not be permitted to modify its Bid.

19.6 Proposal Preparation Cost

The bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by AMC/SCADL to facilitate the evaluation process. AMC/SCADL will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process. All materials submitted by the bidder shall become the property of the AMC/SCADL and may be returned at its sole discretion.

19.7 Submission of RFP Queries

1. A prospective Bidder requiring any clarification on the RFP Document may submit his queries, via email,

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to the following e-mail id till pre-bid meeting date up to 17:00 noon. Email Id for submission of queries: smartcity@ahmedabadcity.gov.in, scadl.amc@gmail.com

2. The queries should necessarily be submitted in the following format and in excel only:

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

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

19.8 Amendment of RFP Document

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

19.9 AMC/SCADL's rights to terminate the selection process

- 1. SCADL may terminate the RFP process at any time and without assigning any reason. SCADL 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 SCADL.

19.10 AMC/SCADL Right to Accept or Reject Any Bid or All Bids

AMC/SCADL reserves the right to accept or reject any bid and annul the bidding process and reject all bids at Page **97** of **193**

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 ground for AMC/SCADL's action.

19.11 Sealing, Marking and Submission of Bids

The proposal documents shall be put in a large envelop having two separate envelopes containing

- 1. **1st Envelop:** Duly signed RFP documents, Addenda & Corrigendum if any along with all necessary supporting documents (pre-qualification checklist & related documents, Technical proposal,MAF, Data sheets) super scribed as "Proposal Documents"
- 2. **2nd Envelop:** Tender Fee & EMD shall be super scribed as "Tender Fee & EMD"

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

RFP Details

- Notice No.: SCADL_RFP_23-24_04
- RFP for Selection of Implementation Agency for SITC, Operation & maintenance of surveillance system Wi-Fi Internet connectivity, in Ahmedabad City
- Last date of Submission: On or before 16/01/2025 up to 05:00 pm.

To,

The Chief Executive Officer,

Smart City Ahmedabad Development Ltd.,

Command and Control Centre,

Opp. Divan Ballubhai School, Nr. Sanskar Kendra, Paldi,

Ahmedabad: 380007

The Bid must be sent strictly by <u>Postal Speed Post or Registered Post AD or in person by the representative of the bidder only on or before the due date. Documents received in any other manner or mode (like courier, email etc.) will not be considered. SCADL won't be responsible for any postal delays.</u>

AMC/SCADL will not accept submission of a proposal in any manner other than that specified in the RFP document. Proposals submitted in any other manner shall be treated as defective, invalid and rejected.

If the envelopes are not sealed and marked as instructed above, the AMC/SCADL assumes no responsibility for the misplacement or premature opening of the contents of the application and consequent losses, if any suffered by the Bidder.

Each Bidder shall submit only one RFP proposal containing documents as below. A bidder who submits more than one RFP under this contract will be disqualified

- (i) Original copy of the tender fee & EMD
- (ii) Pre-qualification criteria related documents
- (iii) Duly signed RFP, Addenda & Corrigendum
- (iv) Technical proposal related documents like MAF, Datasheets etc.

- (v) The Bidder shall prepare original set of the Application (together with originals /copies of documents required to be submitted along therewith pursuant to this RFP 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
- (vi) 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

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.

Proposals must be direct, concise, and complete. AMC/SCADL 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, AMC/SCADL reserves the right to accept or reject any or all the proposals without assigning any reason.

19.12 Late Bids

The Bids received after the due date and the specified time (including the extended period if any) shall not be entertained. The Bids submitted by telex/telegram/fax/e-mail/Courier etc. shall not be considered. No correspondence will be entertained on this matter. SCADL shall not be responsible for any delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained. SCADL reserves the right to modify and amend any of the above-stipulated condition/Criteria depending upon project priorities vis-à-vis urgent commitments.

For the online bid submission, it is advised that the SI takes all necessary precaution for the same, including submitting the Bid well in advance to avoid any last-minute hassles, ensuring that the names/formats of the files to be uploaded are as per the e-tendering portal requirements, using the prescribed browser for upload etc. SCADL shall not entertain any bids which could not be uploaded properly in the portal for whatsoever reasons.

19.13 Language of Bids

The Bids prepared by the Bidder and all correspondence and documents relating to the bids exchanged by the Bidder and AMC/SCADL, shall be written in English language, provided that any printed literature furnished by the Bidder in another language shall be accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern.

If any supporting documents submitted are in any language other than English, Notarized copy of the translation of the same in English language shall be submitted by the Bidder.

19.14 Proposal Submission Format

The entire proposal shall be strictly as per the format specified in this RFP. Bids with deviation from this format shall be liable for rejection.

19.15 Acceptance of Terms & Conditions

The bidder will, by taking participation in the bidding process and submitting the bid documents, be deemed to have thoroughly read, studied and understood the bid documents including scope of work, the terms and conditions, instructions, etc. referred there in and the same are acceptable to the bidder.

19.16 Documents to be submitted

Following list is provided as the guideline for submitting various important documents along with the bid.

- (i) Cover Letter
- (ii) Board Resolution / Power of Attorney executed by the bidder authorizing the signing authority to sign/execute the proposal as a binding document and also execute all relevant agreements forming part of RFP
- (iii)Bidders' Particulars as per format given in RFP
- (iv) Certificate of Registration/Certificate of Incorporation
- (v) Audited Financial statements and relevant certificates
- (vi) Copy of Work Order/Work Completion Certificate/Go live Certificate & Self Declaration
- (vii) GST Registration and Income Tax Certificate
- (viii) Declaration regarding blacklisting in the given format
- (ix) Signed & Stamped RFP document along with Addenda & Corrigendum if any
- (x) Any other document necessary for the bid proposal

19.17 Bid Evaluation Process

- 1. The bids that are submitted online & Physical successfully shall be opened online & offline as per date and time given in Proposal Data Sheet, through proper procedure only in the presence of bidders.
- 2. Bids shall be opened either in the presence of bidders or it's duly authorized representatives. The bidder representatives who are present shall sign a register evidencing their attendance. Two representatives per applicant shall be permitted to be present at the time of opening the tender.
- 3. Total transparency will be observed and ensured while opening the Proposals/Bids.
- 4. SCADL always reserves the rights to postpone or cancel a scheduled Bid opening.
- 5. Bid opening will be conducted in three stages
 - (i) In the first stage, Pre-qualification Proposals would be opened. The EMD & tender fee of the Bidders will be opened on the same day and time, on which the Pre-qualification Proposal is opened.
 - (ii) In the second stage, Technical Proposals of Bidders who pass the Pre-qualification criteria will be opened.

- (iii) In the third stage, Commercial Proposal of those Bidders whose Technical Proposals qualify, would be opened.
- (iv) In the event of the specified date of Bid opening being declared a holiday for SCADL, the bids shall be opened at the same time and location on the next working day. In addition to that, if their representative of the Bidder remains absent, SCADL will continue process and open the bids of all Bidders.

19.18 Selection Process for Bidders

- 1. SCADL will appoint a Technical Evaluation Committee (TEC) to scrutinize and evaluate the prequalification of bidders, technical and commercial bids received. The TEC will examine the Bids to determine whether they are complete and whether the Bid format conforms to the Bid Document requirements. SCADL may waive off any informality or nonconformity in a Bid which does not constitute a material deviation according to SCADL.
- 2. The evaluation process of the RFP proposed to be adopted by SCADL is indicated under RFP section 19.19 below. The purpose of this clause is only to provide the Bidder(s) an idea of the evaluation process that the SCADL may adopt. However, SCADL reserves the right to modify the evaluation process at any time during the Tender process, without assigning any reason, whatsoever, and without any requirement of intimating the Bidder(s) of any such change.

19.19 Evaluation of Bids

- 1. SCADL shall constitute a Tender Evaluation Committee to evaluate the responses of the bidders. The Tender Evaluation Committee shall evaluate the responses to the RFP and all supporting documents/documentary evidence. Inability to submit requisite supporting documents/documentary evidence by bidders may lead to rejection of their bids.
- 2. The Committee may seek inputs from their professional and technical experts in the evaluation process.
- 3. SCADL reserves the right to do a reference check of the experience stated by the Bidder. Any feedback received during the reference check shall be considered during the technical evaluation process.
- 4. The decision of the Tender Evaluation Committee in the evaluation of bids shall be final. No correspondence will be entertained outside the process of evaluation with the Committee. The Tender Evaluation Committee may ask for meetings or presentation with the Bidders to seek clarifications or conformations on their bids.
- 5. The Tender Evaluation Committee reserves the right to reject any or all bids. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.
- 6. Proposal Presentations: The Tender Evaluation Committee will invite each pre-qualified Bidder to make a presentation to SCADL at a date, time and venue decided by SCADL. The purpose of such presentations would be to allow the Bidders to present their proposed solutions to the Committee and orchestrate the key points in their Proposals.

- 7. During the bid evaluation, SCADL may at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered, or permitted. SCADL is entitled to ask for clarifications as many times as possible from the bidders to the satisfaction of the Technical Evaluation committee.
- 8. If the bidder fails to provide the clarification or additional information sought in the stipulated time, the information provided in the technical proposal only will be used for evaluation. It is clearly understood that the additional information or clarification on the technical proposal provided by the bidders will not be the basis for affecting any changes in the Commercial Proposal already submitted by the bidders.
- 9. There should be no discrepancy between the online submitted documents & physical bid submission documents. If any discrepancy found than SCADL will consider the details submitted in physical bid documents for further evaluation. Here note that commercial bid needs to be submitted online only.
- 10. The steps for evaluation are as follows:

Stage 1: Pre-Qualification

- 1. SCADL will examine the bids to determine whether they are complete, responsive, whether required Tender Fee and EMD has been furnished, whether the letters/certificates have been properly signed, and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting any criteria specified in the tender, will be rejected by SCADL and shall not be included for further consideration. Any deviations in proposal response may make the bid liable for rejection.
- 2. All eligible bids will be considered for further evaluation by an Evaluation Committee according to the evaluation process defined in this Bidding document.
- 3. Each of the Pre-Qualification condition mentioned in Pre-qualification criteria Section is MANDATORY. In case, the Bidder does not meet any one of the conditions, the bidder shall be disqualified.
- 4. Bidders would be informed upon their request of their qualification/disqualification based on the Pre-Qualification criteria through email and/or Phone and subsequently, the Bid Security amount shall be returned to the respective disqualified Bidders after the submission of Performance Bank Guarantee by the successful Bidder.

Stage 2: Technical Evaluation

- 1. Technical bid will be evaluated only for the bidders who succeed in Stage 1.
- 2. SCADL will review the technical bids of the short-listed bidders to determine whether the technical bids are responsive. Bids that are not responsive are liable to be disqualified.
- 3. The bidders' technical solutions proposed in the bid document shall be evaluated as per the requirements specified in the RFP and technical evaluation framework as mentioned in RFP.
- 4. Each Technical Bid will be assigned a technical score (T) out of a maximum of 100 marks. Only the bidders who get total of minimum 70 marks will qualify for commercial evaluation stage. Failing to secure minimum marks shall lead to technical rejection of the Bid.

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Stage 3: Commercial Evaluation

- 1. The commercial bids shall not be opened by SCADL until the evaluations of technical bids have been completed. The technically shortlisted Bidders will be informed of the date and venue of the opening of the Commercial Proposals through email or written communication.
- 2. The commercial evaluation will be done on Least Cost/Lowest Cost (L1) basis. L1 price will be the lowest sum total of **Zo** (**Table Z from Section 20.13 of Commercial bid summary**).
- 3. If L1 bidder fails to comply to any of the RFP terms and conditions, it will be considered as a non-performance of the L1 bidder and SCADL will have the rights to give the scope of the selected bidder to a next successful bidder as per the requirement. SCADL's decision will be final in such cases. In this case, L2 bidder will be given a chance to match L1 rate and if bidder agrees, work will be awarded to the L2 bidder. In case of failure of L2 bidder, the same process will continue till Ln bidder (where Ln is the last qualified bidder)
- 4. In case of abnormally low bid, SCADL will also have a right to reject the bid of successful bidder(s) L1, if the evidence supplied does not satisfactorily account for the low price or costs proposed. If a bid is rejected due to this reason, SCADL will have a right to make a similar determination for the next-ranked bid. SCADL may award the contract to the next-ranked bidder, provided that the bid is not determined to be similarly abnormally low. The same process will continue till Ln bidder (where Ln is the last qualified bidder).
- 5. The bid should clearly indicate the price to be charged without any qualifications whatsoever and should exclude all taxes, duties, fees, levies and other charges as may be applicable in relation to the activities proposed to be carried out. SCADL reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
- 6. It is mandatory to provide break up of all taxes, duties and levies wherever applicable and/or payable. The taxes quoted in the offer should be as per the prevailing tax rates. Any subsequent increase in the tax rates or introduction of new tax will be paid by SCADL. Similarly, any benefits arising due to downward revision in tax rates, or any exemptions availed by the Bidders organization should be passed on to SCADL.
- 7. Commercial of BoQ line items must be entered online only.
- 8. An adjustable price quotation or conditional proposal shall be treated as non-responsive and the bid may be rejected.
- 9. Bidders are advised to exercise adequate care in quoting the prices. No excuse for corrections in the quoted figures will be entertained after the commercial proposals are received.
- 10. Errors & Rectification: Arithmetical errors will be rectified on the following basis:
 - (i) 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.
- 11. If there is a discrepancy between words and figures, the amount in words will prevail.
- 12. Bidders shall indicate the unit rates and total Bid Prices of the equipment/ services, it proposes to provide under the Contract. Prices should be shown separately for each item as required in the tender.

- 13. Bidder should not leave any field blank. In case the field is not applicable, Bidder must indicate "o" (Zero) in all such fields.
- 14. If there is no price quoted for certain material or service, the bid shall be declared as disqualified. The bidder has to bid for total products and solutions.
- 15. The Bidder needs to account for all Out-of-Pocket expenses related to Boarding, Lodging and other related items in the commercial bids. Any additional charges must be borne by the bidder. For evaluation of Commercial Bids, SCADL shall make appropriate assumptions as mentioned below 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.
- 16. The bid amount shall be inclusive of packing, forwarding, transportation, insurance, delivery charges and any other charges as applicable. Any other charges as applicable shall be borne by the bidder.

19.20 Notifications of Award and Signing of Contract

- 1. Prior to the expiration of the period of proposal validity, the Bidders will be notified in writing through email that its proposal has been accepted.
- 2. Smart City Ahmedabad Development Limited shall facilitate signing of the contract within the period of 15 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 Work Order.
- 3. The notification of award (LOI) will constitute the formation of the Contract.
- 4. Smart City Ahmedabad Development Limited will send the Bidder the Performa 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 Smart City Ahmedabad Development Limited.

19.21 Failure to agree with the Terms & Conditions of the RFP

Failure of the bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of selection.

19.22 Naming Convention for files

The bidders need to strictly follow the below mentioned File Nomenclature rules while uploading the documents in the bidding portal. For documents mentioned under Eligibility Criteria, the file naming should be Eligibility Criteria_ [Document _Name] For example:

- Eligibility Criteria_ Copy_of_Certification_of_Incorporation
- Eligibility_Criteria_PAN_Card
- Eligibility_Criteria_GST Registration
- Eligibility_Criteria_Financial_Statement_Turnover
- Eligibility_Criteria_Financial_Statement_Networth

- Eligibility_Criteria_OEM_PO Copy
- Eligibility_Criteria_OEM_Undertaking Letter
- Eligibility_Criteria_Self_Declaration_Blacklisting

For the documents in Annexures, the file naming should be: Anx_[S.no of Annexure]_[Annexure Name] For example:

- Anx_I_CoverLetter
- Anx II Bidder Information Sheet

In case of any large file (exceeding 3MB) which need to be split in two parts or more, the naming should be:

- Anx_I_CoverLetter _Part_1
- Anx_I_CoverLetter _Part_2

For any other file not covered under this, should be named appropriately as per its contents. All files should be in pdf formats and should not be password protected or encrypted. The files should not be zipped. Any other format of the file other than pdf shall not be considered as part of the submitted bid.

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

Smart City Ahmedabad Development Limited 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. SCADL also reserves the right to omit one or more than one (1) component / subcomponent of the project for the purpose of the execution and accordingly winning Bidder shall be awarded a work order for the remaining component / sub-component only. No claim from the Bidder shall be entertained in this regard.

19.24 Modification or Withdrawal of Bids

A Bidder wishing to withdraw its bid shall notify Smart City Ahmedabad Development Limited by email 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.

The notice of withdrawal shall be addressed to Smart City Ahmedabad Development Limited at the address named in the bid Data Sheet, bear the Contract name, the <Title> and < bid No.>, and the words "bid Withdrawal Notice."

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.

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.

19.25 Quantity variation

The quantity mentioned in the Commercial Bid format is only for indicative in nature. The actual quantity depends on the actual site survey conducted by the Bidder and after same is approved by Smart City Ahmedabad Development Limited for installation of equipment at Data center and at field locations. Smart City Ahmedabad Development Limited reserves the right to vary quantity at the time of award of the contract or after the contract is awarded.

- i. Smart City Ahmedabad Development Limited reserves its right to award additional quantity of work order +/- 25% of the original quantity at the same price and terms and conditions quoted in original contract. Accordingly, all software applications like Wi-Fi controller etc. must support up to 25% additional quantities of respective active equipment in addition to the quantities mentioned in Financial bid table against respective line items from all types of license perspectives.
- ii. Smart City Ahmedabad Development Limited also reserves right to award change request work order +/- 25% of the original project cost for the work needed to execute the work defined in scope of work defined in original contract.
- iii. For any change request/shifting Selected Bidder & OEM will be solely responsible and AMC/SCADL will not pay any additional cost.

19.26 Price Variation

During the validity of the contract including the extended period if any, if the Bidder supplied any item included in BoM of this RFP to any other department / organization / individual at a price lower than the price fixed in the contract, the Bidder must voluntarily pass on the price difference with immediate effect.

19.27 Governing Law

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

19.28 Restriction on Transfer of Agreement

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

19.29 Limitation of liability

Successful bidder's cumulative liability for its obligations under the contract shall not exceed the contract value.

If the contract is partially completed, then in such case successful bidder's cumulative liability will not exceed the contract value of remaining/pending work of the contract.

19.30 Sub contracting

The Bidder would not be allowed to sub-contract the work, except for the following:

- Cabling and fixtures work, Civil work
- Electric work
- Establishment of passive components of network infrastructure

Sub-contracting of the above scope of work by the bidder shall be allowed only with prior written approval of Authority. However, even if the work is sub-contracted, the sole responsibility of the work shall lie with the lead bidder. SI shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor

19.31 Force Majeure and Vandalism

In the event that any Damages to items due to Vandalism (physical Majeure attack by public, tampering of equipment by SCADL 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 etc.) of any kind during Warranty Period and Maintenance Period shall be the liability of Smart City Ahmedabad Development Limited. In such case, Smart City Ahmedabad Development Limited shall request the successful Bidder to repair/replace the damaged unit and reinstall the same. All costs towards the same shall be reimbursed by SCADL/Authority to the System Integrator less of insurance proceeds if need of replacement so arise then replacement shall be on tender rates only.

The Bidder 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 Bidder, not involving the Bidder's fault or negligence and not foreseeable. Such events may include Acts of God & acts of Government of India in their sovereign capacity.

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, Smart City Ahmedabad Development Limited and the SI shall hold consultations with each other in an endeavor to find a solution to the problem.

Notwithstanding anything to the contrary mentioned above, the decision of the Smart City

Ahmedabad Development Limited shall be final and binding on the SI.

19.32 Resolution of Dispute

If any dispute arises between the Parties hereto during the subsistence or thereafter, in connection with the validity, interpretation, implementation or alleged material breach of any provision of the Agreement or regarding a question, including the questions as to whether the termination of the Contract Agreement by one Party hereto has been legitimate, both Parties hereto shall endeavor to settle such dispute amicably.

The attempt to bring about an amicable settlement is considered to have failed as soon as one of the Parties hereto, after reasonable attempts [which attempt shall continue for not less than 30 (thirty) days], give 15 days' notice thereof to the other Party in writing.

In the case of such failure, the dispute shall be referred to the Chairman, SCADL as a first level of arbitration. The place of the arbitration shall be Ahmedabad, Gujarat.

The Arbitration proceeding shall be governed by the Arbitration and Conciliation Act of 1996 as amended. The proceedings of arbitration shall be in English language. The arbitrator's award shall be substantiated in writing. The arbitration tribunal shall also decide on the costs of the arbitration procedure.

19.33 Discount

The SIs are advised not to indicate any separate discount in the Financial Bid. Discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, shall not be considered for evaluation purpose. However, in the event of such an offer is found to be the lowest without considering the discount, the Purchaser shall avail such discount at the time of award of contract.

19.34 Site visit and verification of information

SIs are encouraged to submit their respective Bids after doing a thorough survey of project site and ascertaining for themselves the site conditions, traffic, location, surroundings, climate, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather data, applicable laws and regulations, and any other matter considered relevant by them.

It shall be deemed that by submitting a Bid, the SI has made a complete and careful examination of the Bidding Documents

- Received all relevant information requested from the Authority
- Accepted the risk of inadequacy, error or mistake in the information provided in the Bidding Documents or furnished by or on behalf of the Authority relating to any of the matters
- Satisfied itself about all matters, things and information including matters herein above

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- necessary and required for submitting an informed Bid, execution of the Project in accordance with the Bidding Documents and performance of all of its obligations thereunder.
- Acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bidding Documents or ignorance of any shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from the Authority, or a ground for termination of the Concession Agreement by the Concessionaire
- Acknowledged that it does not have a Conflict of Interest; and agreed to be bound by the undertakings provided by it under and in terms hereof.

19.35 Ownership and Licenses

The ownership of all hardware/software developed/customized/ configured/ procured as part of the project and related documentation for the project would always lie with the SCADL. All licenses for software procured related to project to be perpetual and in the name of Smart City Ahmedabad Development Limited. The SI will be required to produce the Licenses/ATS/Warranty and other documents from the respective OEMs clearly mentioning the product name, quantity, duration, type of support, etc.

19.36 General Clause related to Any SIs/Sub-Selected vendor from a Country which shares a Land Border with India

- i. Any SI from a country which shares a land border with India will be eligible to bid in this tender only if the SI is registered with the Competent Authority (Registration committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)).
- ii. "SI" (including the term 'tenderer', 'consultant', 'OEM' or 'service provider' in certain contexts) means any person or firm or company, every artificial juridical person not falling in any of the descriptions of SIs stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- iii. "SI from a country which shares a land border with India" means:
 - a) An entity incorporated, established or registered in such a country; or
 - b) A subsidiary of an entity incorporated, established or registered in such a country; or
 - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d) An entity whose beneficial owner is situated in such a country; or
 - e) An Indian (or other) agent of such an entity; or
 - f) A natural person who is a citizen of such a country; or
- iv. The beneficial owner for the purpose of (iii) above will be as under:
 - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person,

has a controlling ownership interest or who exercises control through other means.

- a) Explanation—
- b) "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company
- c) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.
- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals
- 4. Where no natural person is identified under i or ii or iii above, the beneficial owner is the relevant natural person who holds the position of senior managing official
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- v. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- vi. The successful SI shall not be allowed to sub-contract works to any selected vendor from a country which shares a land border with India unless such selected vendor is registered with the Competent Authority (Registration committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)).

19.37 Risk purchase clause

- i. Purchaser on identifying any material breach of contract by Bidder, shall give Bidder a cure period of 90 days to correct the breach. If Bidder fails to cure the breach in the said time duration and accept its inability to correct, purchaser may terminate the part of the contract that is breached and employ a third party to do the work on behalf of purchaser.
- ii. Bidder shall not be liable for any compensation for the work executed this way. This procurement from a third party will be done at the selected Bidder's (who has failed to perform its obligations & thus defaulted) risk, cost and responsibility. Any incremental cost borne by the Tenderer in procuring such Hardware / Services / Deliverables shall be borne by the selected Bidder (who has failed to perform its obligations & thus defaulted). Any such incremental cost incurred in the procurement of such Hardware / Services / Deliverables from other source will be recovered from the pending due and payable Payments / Security Deposit / Bank Guarantee provided by the selected Bidder (defaulted Bidder) under this scope of this RFP and if the value of the Hardware / Services / Deliverables under risk purchase exceeds the amount of pending payable payments / Security Deposit and / or Bank Guarantee, the

same may be recovered, if necessary, by due legal process.

iii. Bidder shall execute the balance part of work as agreed under the contract.

19.38 Termination

The Tenderer may, terminate this Contract in full or in part by giving the SELECTED BIDDER a prior and written notice indicating its intention to terminate the Contract under the following circumstances:

- a. Where the Tenderer is of the opinion that there has been such Event of Default on the part of the SELECTED BIDDER which would make it proper and necessary to terminate this Contract and may include failure on the part of the SELECTED BIDDER to respect any of its commitments with regard to any part of its obligations under its Bid, the RFP or under this Contract including the following:
 - I. failure to perform the obligations under the Contract;
 - II. the SELECTED BIDDER and its team have failed to conform with any of the service specifications as set out in the RFP and the Contract;
 - III. the SELECTED BIDDER has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Proposal, the RFP and this Contract;
 - IV. The SELECTED BIDDER has failed to comply with any terms and conditions of this RFP & the Contract;
 - V. There is an undue delay in achieving the agreed timelines for delivering the services under this Contract due to reasons solely attributable to the SELECTED BIDDER;
 - VI. If it comes to knowledge of the Tenderer that the SELECTED BIDDER or any of their personnel have been involved in any fraudulent or corrupt practices or any other practice of similar nature;
 - VII. Where it comes to the Tenderer's attention that the SELECTED BIDDER (or the SELECTED BIDDERs' Team) is in a position of actual conflict of interest with the interests of the Tenderer, in relation to any of the terms of the SELECTED BIDDER's Bid, the RFP or this Contract.
 - VIII. Where the SELECTED BIDDER's ability to survive as an independent corporate entity is threatened or is lost owing to any reason whatsoever, including inter-alia the filing of any bankruptcy proceedings against the SELECTED BIDDER, any failure by the SELECTED BIDDER to pay any of its dues to its creditors, the institution of any winding up proceedings against the SELECTED BIDDER or the happening of any such events that are adverse to the commercial viability of the SELECTED BIDDER. In the event of the happening of any events of the above nature, the Tenderer shall reserve the right to take any steps as are necessary, to ensure the effective transition of the project to a successor SELECTED BIDDER and to ensure business continuity.
- b. Where there has been an occurrence of such Event of Defaults, inter alia, as stated above, the SCADL shall issue a notice of default to the SELECTED BIDDER, setting out specific defaults / deviances / omissions and providing a period of up to thirty (30) days to enable the SELECTED BIDDER to remedy the default/ deviances / omissions committed. It shall be the

responsibility of the SELECTED BIDDER to maintain the agreed Quality of Service, even during the period when the notice for termination of agreement is pending and if the Quality of Performance of Solution is not maintained, during the said notice period, it shall be treated as material breach liable for termination at risk and consequent of SELECTED BIDDER and Performance Bank Guarantee shall be forfeited, without any further notice.

- c. **Termination for Insolvency:** The Tenderer may at any time terminate the Contract by giving written notice to the SELECTED BIDDER, without compensation to the SELECTED BIDDER, if the SELECTED BIDDER becomes bankrupt or otherwise insolvent, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued or shall accrue thereafter to the Tenderer.
- d. **Termination for Convenience:** The Tenderer, may, by prior written notice sent to the SELECTED BIDDER at least 3 months in advance, terminate the Contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the Tenderer's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

The SELECTED BIDDER may, subject to approval by the Tenderer, terminate this Contract before the expiry of the term by giving the Tenderer a prior and written notice at least 6 months in advance indicating its intention to terminate the Contract.

19.39 Consequences of termination

- I. In the event of termination of this contract due to any cause whatsoever, the contract with stand cancelled effective from the date of termination of this contract.
- II. In case of exigency, if the Tenderer gets the work done from elsewhere, the difference in the cost of getting the work done shall be borne by the SELECTED BIDDER as mentioned in clause –14.37 (Risk Purchase) unless the Termination is due to any act and/or omission by the reason solely attributable to Tenderer.
- III. Where the termination of the Contract is prior to its stipulated term on account of a Default on the part of the SELECTED BIDDER or due to the fact that the survival of the SELECTED BIDDER as an independent corporate entity is threatened/has ceased, or for any other reason, whatsoever, the Tenderer through re-determination of the consideration payable to the SELECTED BIDDER as agreed mutually by the Tenderer and the SELECTED BIDDER or

through a third party acceptable to both the parties may pay the SELECTED BIDDER for that part of the Services which have been authorized by the Tenderer and satisfactorily performed by the SELECTED BIDDER up to the date of termination. Without prejudice to any other rights, the Tenderer may retain such amounts from the payment due and payable by the Tenderer to the SELECTED BIDDER as may be required to offset any losses caused to the Tenderer as a result of any act/omissions of the SELECTED BIDDER. In case of any loss or damage due to default on the part of the SELECTED BIDDER in performing any of its obligations with regard to the execution of the scope of work under this Contract, the SELECTED BIDDER shall compensate the Tenderer for any such loss, damages or other costs,

incurred by the Tenderer. Additionally, other members of its team shall perform all its obligations and responsibilities under this Contract in an identical manner as were being performed before the collapse of the SELECTED BIDDER as described above in order to execute an effective transition and to maintain business continuity. All third parties shall continue to perform all/any functions as stipulated by the Tenderer and as may be proper and necessary to execute the scope of work under the Contract in terms of the SELECTED BIDDER's Bid, the RFP and this Contract.

- IV. Nothing herein shall restrict the right of the Tenderer to invoke the Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to the Tenderer under law.
- V. The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of this Contract that are expressly or by implication intended to come into or continue in force on or after such termination.
- VI. Actions pursuant to Termination of Agreement:
 - Notwithstanding any other rights and remedies provided elsewhere in the agreement, upon termination of this agreement.
 - a) Neither Party shall represent the Other Party in any of its dealings.
 - b) Neither Party shall intentionally nor otherwise commit any act(s) as would keep a third party to believe that the other Party is still the former Party's service provider, as the case may be.
 - c) Each party shall stop using the other Party's name, trademark, etc., in any audio or visual form.

19.40 Exit Management

- a) This sets out the provisions, which will apply on expiry or termination of the Master Service Agreement, the Project Implementation, Operation and Management SLA.
- b) In the case of termination of the Project Implementation and/or Operation and Management, the Parties shall agree at that time whether and if so during what period, the provisions of this Schedule shall apply.
- c) The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Schedule.

a) Cooperation and provision of Information

During the exit management period:

- a. The SI will allow the purchaser or its nominated agency access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable the purchaser to assess the existing services being delivered.
- b. Promptly on reasonable request by the purchaser, the SI shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with this agreement relating to any material aspect of the services (whether provided by the System integrator or sub-contractors appointed by the SI). The purchaser

shall be entitled to copy of all such information. Such information shall include details pertaining to the services rendered and other performance data. The SI shall permit the purchaser or its nominated agencies to have reasonable access to its employees and facilities, to understand the methods of delivery of the services employed by the SI and to assist appropriate knowledge transfer.

b) Confidential Information, Security and data

- a) The SI will promptly on the commencement of the exit management period supply to the purchaser or its nominated agency the following:
 - I. Information relating to the current services rendered and customer and performance data relating to the performance of sub-contractors in relation to the services;
 - II. Documentation relating to Intellectual Property Rights;
 - III. Documentation relating to sub-contractors;
 - IV. All current and updated data as is reasonably required for purposes of purchaser or its nominated agencies transitioning the services to its Replacement SI in a readily available format nominated by the purchaser, its nominated agency;
 - V. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable purchaser or its nominated agencies, or its Replacement SI to carry out due diligence in order to transition the provision of the Services to purchaser or its nominated agencies, or its Replacement System integrator (as the case may be).
- b) Before the expiry of the exit management period, the SI shall deliver to the purchaser or its nominated agency all new or up-dated materials from the categories set out in schedule above and shall not retain any copies thereof, except that the SI shall be permitted to retain one copy of such materials for archival purposes only.

c) Exit Management Plan

The *SI* shall provide the purchaser or its nominated agency with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following

- a) aspects of exit management in relation to the MSA as a whole and in relation to the Project Implementation, and the Operation and Management SLA.
 - I. A detailed program of the transfer process that could be used in conjunction with a Replacement *SI* 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;

- II. Plans for the communication with such of the SI's sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on the purchaser's operations as a result of undertaking the transfer;
- III. (If applicable) proposed arrangements for the segregation of the SI's networks from the networks employed by purchaser and identification of specific security tasks necessary at termination;
- IV. Plans for provision of contingent support to purchaser, and Replacement SI for a reasonable period after transfer.
- b) The SI shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
- c) Each Exit Management Plan shall be presented by the SI to and approved by the Purchaser or its nominated agencies.
- d) The terms of payment as stated in the Terms of Payment Schedule include the costs of the SI complying with its obligations under this Schedule.
- e) In the event of termination or expiry of MSA, and Project Implementation, each Party shall comply with the Exit Management Plan.
- f) During the exit management period, the SI 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.
- h) This Exit Management plan shall be furnished in writing to the purchaser or its nominated agencies within 90 days from the Effective Date of this Agreement.

19.41 Indemnity

The SI shall indemnify and defend SCADL and its representatives & employees and hold SCADL, its representatives, employees harmless from:

- a) Damages and losses caused by its negligent or intentional act or omission or any damages and losses caused by the negligent act of any third party or sub-contractor or agency engaged by the SI;
- b) Damages and losses resulting from the non-compliance with the established obligations; Third Party claim against SCADL or its nominated agency that any Deliverables/Services/Equipment provided by the SI infringes a copyright, trade secret, patents or other intellectual property rights of any third party in which case the SI shall defend such claim at its expense and shall pay any costs or damages that may be finally awarded against SCADL or its nominated agency.
- c) Any environmental damages caused by SI and/or its representatives or employees or employees of any third party or sub-contractor or agency engaged by the SI.
- d) Breach (either directly by SI or through its representatives and/or employees) of any representation and guarantee declared herein by SI;
- e) Any and all claims, actions, suits, proceedings, taxes, duties, levies, costs, expenses,

damages and liabilities, including attorneys' fees, arising out of, connected with, or resulting from or arising in connections with the services provided due to neglect, omission or intentional act.

19.41 Severance

In the event any provision of this Contract is held to be invalid or unenforceable under the applicable law, the remaining provisions of this Contract shall remain in full force and effect.

19.42 Confidentiality

- 1. The SI shall not use Confidential Information, the name or the logo of the Tenderer except for the purposes of providing the Service as specified under this RFP;
- 2. The SI shall not, either during the term or 6 months after expiration of this Contract, disclose any proprietary or confidential information relating to the Services, Contract or the network architecture, Tenderer's business plan or operations without the prior written consent of the Tenderer.
- 3. The SI may only disclose Confidential Information in the following circumstances to a member of the SI's Team ("Authorized Person") with the prior written consent of the Tenderer if:
 - a. the Authorized Person needs the Confidential Information for the performance of obligations under this contract;
 - b. the Authorized Person is aware of the confidentiality of the Confidential Information and is obliged to use it only for the performance of obligations under this contract
- 4. The SI shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidential agreement with the members of the subcontractors and other service provider's team members to the satisfaction of the Tenderer.
- 5. The SI shall be responsible for any breach of the confidentiality clause by its antecedents or delegates or its subcontractors.
- 6. The SI shall notify the Tenderer promptly if it is aware of any disclosure of the Confidential Information otherwise than as permitted by this Contract or with the authority of the Tenderer.
- 7. The Tenderer reserves the right to adopt legal proceedings, civil or criminal, against the SI in relation to a dispute arising out of breach of obligation by the SI under this clause.

20. Format for Pre-Qualification / Bidder's eligibility criteria

20.1 Checklist for Pre-Qualification documents

#	Documents to be submitted	Documentary Proof (Page No.)
1.	Bid Fee of Rs/- (including GST) by Demand Draft or Banker's Cheque	
2.	EMD of Rs.2,00,00,000 /- as per section 19.3	
3.	RFP Cover Letter	
4.	Particulars of the Bidders (Form PQ 1)	
5.	Copy of Certificate of Incorporation/Registration Certificate	
6.	Details of Annual Turnover and Net-worth for last two financial years (Form PQ 2 & PQ 3)	
7.	Certificate from the Statutory auditor / CA clearly specifying the average annual turnover (of last 2 financial years) and Net-worth for the specified years (Form PQ 2 & PQ 3).	
8.	Declaration letter that the firm is not blacklisted by any Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of India/Any Government Agency in India as on the date of bid submission, in the format given in the RFP (Form PQ 8). In case of consortium, all members to submit.	
9.	Affidavit on Non-judicial Rs 300 stamp paper (Form PQ 8,PQ-10)	
10.	Details of the projects executed (Form PQ 4,5,6,7 TQ-2,3,4,5)	
11.	Copy of Audited Balance Sheet for last three financial years. In case of consortium, all members to submit.	
12.	Copy of GST registration.	
13.	Copy of PAN registration.	
14.	Copy of work orders and client certificate for Bidder's Eligibility Criteria	

Note:

• All Pre-qualification bid document(s)/ details should be duly sealed, signed and notarized.

Checklist for Technical-Qualification documents

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			

Note:

• All Pre-qualification and Technical qualification bid document(s)/ details should be duly sealed, signed and notarized.

20.2 RFP Cover Letter

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

Date: dd/mm/yyyy

To,
The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi
Ahmedabad: 380007

Subject: Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam with advanced analytics for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

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

Dear Sir/Dear Sir,

Having examined the RFP, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the RFP for the "Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam with advanced analytics for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City".

We attach hereto our responses to pre-qualification requirements and technical proposals as required by the RFP. 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 AMC/SCADL, is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed from the selection process and legal action.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP document and also agree to abide by this RFP response.

We agree that you are not bound to accept any RFP 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 RFP response.

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for
surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

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

Signature of Authorized Signatory (with official seal)

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

20.3 PQ 1: Bidder Information Format

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

To whomsoever it may concern

Please find below the details of Bidder for participation in "Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City" tender:

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

#	Particulars	Prime/Lead Bidder (Consortium Member #1)	Consortium Member #2
13	Authorized Signatory Contact Details		
14	Authorized Signatory Email ID		

Yours Sincerely,

Signatura	of Authori	zad Signa	atomy (with	official	പേവി
Signature	of Authori	zeu signa	atory (with	Ulliciai	scarj

Name :

Designation :

Address : Telephone& Fax : E-mail address :

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

RF	FP - Selection of Impl	ementa	tion Agency for SI	FC. Operation, and	d Main	ntenance of Surveil	lance System. Da	shcam for
	rveillance of Municip		0 .				•	
20	.3 PQ 2: Bidde1	's Anı	nual turnove	r over last 2 f	inan	icial years		
	< <to be="" printed<="" td=""><td></td><td>dder company's consortium all m</td><td></td><td>-</td><td>-</td><td>d signatory. Ir</td><td>n case of</td></to>		dder company's consortium all m		-	-	d signatory. Ir	n case of
							Date: dd/mm/	уууу
To Th	o ne Chief Executive (Officer						
	nart City Ahmedab		elopment Limited	i				
	ommand and Contr		-					
-	pp. Divan Ballubha		l,					
	r. Sanskar Kendra,							
An	nmedabad: 380007	'•						
	ibject: Selection o ashcam for surveilla							
De	ear Sir/ Madam,							
Ι	hereby declare	that I	have scrutini	zed and audit	ed th	ne financial sta	atement of	
\mathbf{M}_{i}					nover	of the bidder fo	r last three	
fin	ancial year as per a	audited	statement is as ı	ınder:				
			FY 2022-23	FY 2023-24		Average		
	# Details	\$	(in Crores)	(in Crores)		Turnover		
	Overall Annu	ลไ	(i)	(ii)	[(1))+(ii)/2]		
	1 Turnover	ui						
	Contact Details of	official	s for future corre	snondence regar	ding t	he hid process:		
	Details				umg c	-	mto ot	1
	Name		Authorized	Signatury		Secondary Co	mact	
	Title							
	Company Addres	S						
	Mobile							

Fax Email Id

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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 Documentary evidence.

20.4 PQ 3, TQ 1: Auditor's/CA Certificate for net worth for Bidder

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

Date: dd/mm/yyyy

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

#	Financial Year Ending	Annual Turnover (INR)	Net-worth
1.	31st March, 2023		
2.	31st March, 2024		
	Average Turnover		

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

Yours Sincerely,

Signature of Auditor/CA (with official seal) Name :

Designation:

Address :

Telephone& Fax :

E-mail address :

$20.5 PQ_4,5,6,7$ and $TQ_2,3,4,5$ Details of similar work undertaken

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

Date: dd/mm/yyyy

To,

The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007

Sir/Madam,

I have carefully gone through the Terms & Conditions contained in the RFP Document for "Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City".

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

Name of the Project	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				
Outcomes of the project				
Other Details				
Total cost of the project (CAPEX +				
OPEX)				
Total cost of the services provided by the				
Bidder				

Duration of the project (number of months, start date, completion date, current status)			
Go Live Date			
Mandatory Supporting Documents:			
Copy of completion / Go Live certificate			
issued by client,			
Copy of Work order clearly highlighting			
scope of work, Bill of Material and value			
of contract / order along with the			
components executed			
Copy of contract agreement with client			

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

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

Note: To be submitted with any other supporting details specified as documentary evidence as mentioned in section 2.1 and 2.2 (PQ and TQ criteria)

20.6 PQ_8: Declaration by the bidder for not being Blacklisted / Debarred

(To be submitted on a 300-rupee stamp paper)

Date: dd/mm/yyyy

To
The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Name of the Bidder: Authorized Signatory:

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

Sir/Madam,	
In response to the Tender Ref. No	_dated
for Selection of Implementation Agency for SITC, Operation Maintenance of Surveillance System, Dashcam for surveillance of Maintenance and Wi-Fi Internet Connectivity in Ahmedabad City, as an partner/ Director of, I/ We hereby declare that prese Company/ firm is having unblemished record and is not ineligible for corrupt and fraudulent practices either indefinitely or for a particular period of any Central Government / Any State Government / Smart City SPV / PSU/ Supreme India/Any Government Agency in India as on the date of bid submission.	owner/ently our declared of time by
We further declare that presently our Company/ firmblacklistedand not declared ineligible for reasons other than corrupt and fraudulent practice. Central Government / Any State Government / Smart City SPV / PSU/ Supreme Court of I Government Agency in India as on the date of bid submission. Also, there is no any crim booked by any Government authority against the bidder in any court in last 7 years a submission date.	ces by any ndia/Any ninal case
If this declaration is found to be incorrect then without prejudice to any other action that taken, my/ our security may be forfeited in full and the tender if any to the extent accepte cancelled.	-

Page 128 of 193

]	RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance Systemsurveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City	stem, Dashcam for
	Seal of the Organization: Business Address: Date: Place:	
	Tittee.	
		Page 129 of 193

20.7 PQ_8: Affidavit

Date:

(The affidavit format as indicated below to be furnished on non-judicial stamp paper of Rs: 300 and duly notarized)

Name of work: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam with advanced analytics for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City.

- 1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
- 3. The undersigned hereby authorize(s) and request(s) any bank, person, authorities, government or public limited institutions, firm or corporation to furnish pertinent information deemed necessary and requested by the SCADL to verify our statements or our competence and general reputation.
- 4. The undersigned understands and agreed that further qualifying information may be requested, and agrees to furnish any such information at the request of the SCADL.
- 5. The SCADL and its authorized representative are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Affidavit will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by you to verify statements and information provided in the tender or with regard to the resources, experience and competence of the Applicant.
- 6. My/ our offer shall not be considered in case of fake/ forged document(s) found during verification at any stage or at any stage of contract. I/ We are agreed to whatever action (s) taken by competent authority of corporation in the aforesaid circumstances such as forfeiture of security deposit and debarring from participation in future tenders for the period/ years as deemed fit by the corporation and informing the same to all other state/ central level Government/ semi government organizations.

Signed by the Authorized Signatory of the firm	
Title of the office:	
Name of the firm:	

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tem, y, as y our t, in icer, f the ent/
t

20.9 PQ - 8 : Self-Declaration - Not convicted in any criminal offense

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

Date: dd/mm/yyyy	
To,	
The Chief Executive Office. Smart City Ahmedabad De Command and Control Cer Opp. Divan Ballubhai Scho Nr. Sanskar Kendra, Paldi, Ahmedabad: 380007.	velopment Limited ntre, pol,
Sir/Madam,	
RFP for Selection of Sel Surveillance System, Dash in Ahmedabad City, as an declare that presently our Conot have our directors and the making of false statement within a period of three year otherwise disqualified. eith PSU.	Ref. No
	orfeited in full and the tender if any to the extent accepted may be cancelled.
Name of the SI Authorized Signatory Seal of the Organization Business Address Date Place	: : : : : : : : : :

20.10 Bank Guarantee format for EMD

FORMAT OF THE UNCONDITIONAL AND IRREVOCABLE BANK GUARANTEE FOR

EARNEST MONEY DEPOSIT

(To be submitted on Rs. 300/- non-judicial stamp paper)

In consideration of the (Insert name of the Bidder) submitting the Bid inter alia for "PEP for Selection of Implementation Agency for SITC Operation and Maintenance of
"RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of
Surveillance System, Dashcam with advanced analytics for surveillance of Municipal
Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City", for meeting the terms and
conditions in response to the RFP DOCUMENT dated issued by Smart
City Ahmedabad Development Limited ("SCADL"), and SCADL agreeing to consider the Bid
of
DOCUMENT, the (Insert name and address of the bank issuing the Bid Bond,
and address of the head office) (Here in after referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to SCADL or its authorized representative
at
Rupees
This guarantee shall be valid and binding on the Guarantor Bank up to and including
Our liability under this Guarantee is restricted to Rupees(Rs(Rs).
SCADL or its authorized representative shall be entitled to invoke this Guarantee until
Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the
written demand from SCADL or its authorized representative, made in any format, raised at the
above mentioned address of the Guarantor Bank, in order to make the said payment to SCADL or its authorized representative.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection, disputes, or disparities raised by the Bidder or any other person. The Guarantor Bank shall not require SCADL or its authorized representative to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against SCADL or its authorized representative in respect of any payment made hereunder.

This BANK GUARANTEE shall be payable at Ahmedabad.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts atshall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly, SCADL or its authorized representative shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder to enforce any security held by SCADL or its authorized representative or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

The Guarantor Bank hereby agrees and acknowledges that SCADL shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

In witness whereof the Bank, through its auth	orized officer, has set its hand and stamp on this
day of at	
Witness:	
Signature	Signature
Name	Name
Address	Address
Designation with Bank Stamp Signature	Designation with Bank Stamp Signature
Name and address	
Attorney as per power of attorney No	
For:[Insert N	ame of the Bank]
Banker's Stamp and Full Address:	
Dated this day of 2023	
Note: The Stamp Paper should be in the name	e of the Executing Bank

20.11 Format for Performance Bank Guarantee

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

IN CO	NSIDERATION OF Through
Implement for surface (herein dated to Compace AGREI) of acceptance of acceptance and acceptance	L, Ahmedabad (Smart City Ahmedabad Development Limited) for "Selection of mentation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam weillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City" after referred to as the "said work") on the terms and conditions of the AGREEMENT the
Rs due per Bank R	ompany has agreed to furnish SCADL in Guarantee of the Nationalized Bank for the sum of
i.	Due performance and observances by the Company of the terms covenants and conditions on the part of the Company contained in the said AGREEMENT, AND
ii.	Due and punctual payment by the Company to SCADL of all sum of money, losses, damages, costs, charges, penalties and expenses that may become due or payable to SCADL by or from the Company by reason of or in consequence of any breach, non-performance or default on the part of the Company of the terms covenants and conditions under or in respect of the said AGREEMENT.

- a) The guarantee herein contained shall remain in full force and effect during the subsistence of the said AGREEMENT and that the same will continue to be enforceable till all the claims of SCADL are fully paid under or by virtue of the said AGREEMENT and its claims satisfied or discharged and till SCADL certifies that the terms and conditions of the said AGREEMENT have fully and properly carried out by the Company.
- b) We shall not be discharged or released from liability under this Guarantee by reason of
 - a. any change in the Constitution of the Bank or
 - b. any arrangement entered into between SCADL and the Company with or without our consent;
 - c. any forbearance or indulgence shown to the Company,
 - d. any variation in the terms, covenants or conditions contained in the said AGREEMENT;
 - e. any time given to the Company, OR
 - f. any other conditions or circumstances under which in a law a surety would be discharged.
- d) We shall not revoke this guarantee during its currency except with the previous consent of SCADL in department in writing;

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

- under the law, relating to sureties so releasing the guarantor and the Guarantor hereby waives all suretyship and other rights which it might otherwise be entitled to enforce.
- h) That the absence of powers on the part of the Company or SCADL to enter into or execute the said AGREEMENT or any irregularity in the exercise of such power or invalidity of the said AGREEMENT for any reason whatsoever shall not affect the liability of the Guarantor/Bank and binding on the bank notwithstanding any abnormality or irregularity

1	 	 	
2	 •	 •••••	

Being respectively the Director of the Company, who in token thereof, has here to set his respective hands in the presence of -

1	• • • • •	•••	•••	• • •	•••	••	 ••	••	••	••	• • •	••	••	••	•••	••	••	••	••	 •	••	••	•	••	••	••	٠.	•
2							 ••				•••	••								 ••								•

20.12 Commercial Bid Cover Letter

<<To be printed on letter head of Prime/Sole Bidder and signed by Authorized signatory of Prime/Sole Bidder>>

To,

The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City

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

Dear Sir/ Madam,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of "Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam with advanced analytics for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City" do hereby propose to provide services as specified in the Bid Document referred above.

1. PRICE AND VALIDITY

All the prices mentioned in our Tender are in accordance with the terms as specified in the Tender documents. All the prices and other terms and conditions of this Tender are valid for entire contract duration.

We hereby confirm that our Tender prices include all taxes. Taxes are quoted separately under relevant sections, as specified in the Bid Document formats.

We have studied the clause relating to Indian Income Tax and hereby declare that if any income tax, surcharge on Income Tax, Professional and any other corporate Tax in altercated under the law, we shall pay the same.

2. DEVIATIONS

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

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

3. QUALIFYING DATA

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

4. BID PRICE

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

5. CONTRACT PERFORMANCE GUARANTEE BOND

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

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

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

Thanking you, Yours faithfully,

Business Address:

(Signature of the Authorized Signatory) Name
Designation Seal.
Date:
Place:

20.13 Commercial Bid Summary -Part A+ Part B

Table Z:

Sr.No.	Commercial Bid Summary	Total Cost (Excluding GST) (INR)	Total Cost (Including GST) (INR)
1	Total project value of Co from Schedule III Table of Part A of RFP		
2	Total project value of X from Table X of Part B of RFP		
	Zo= Total Project Cost (INR) (Sr.1+ Sr.2)		
	Total Project Cost In words		

20.14 General Instructions on Preparation of the Technical Proposal

Bidders shall 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.

Bidder is expected to divide its Bid in following sections / documents:

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 in Similar projects

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 center Architecture)

- Details of the application software proposed
- Details of Data Center computing requirement and proposed BoQ for the same
- 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 and Methodology for Design, Installation, Configuration and Maintenance of hosted components 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.

Other Details:

Bill of Material: This document should give details of all the proposed IT and Non-IT components, with their proposed make and model and without specifying the costs. Please note that only one Make and Model to be proposed as part of the technical bid by the Bidder. SCADL reserves the right to reject the bid in case of submission of multiple make and model against one product.

Compliance to Technical and Functional Specifications as mentioned in Section 21, Annexure I.

Make and Model of all IT as well as non-IT components along with datasheets highlighting the Technical Specification parameters in each datasheet for compliances. Bidder shall not be allowed to change their product post onboarded on the project. However, during the evaluation phase, Bidder may be asked to provide requisite justification / additional documents to validate the meeting of the specification as per the requirements of RFP. Bidder may also be asked to replace the product if in case it does not meet the RFP criteria. Further, during the project implementation phase (Any stage of the project), if it is observed that the product is not meeting the RFP requirement, Bidder may have to replace the product with better specification(s), from same OEM at no additional cost to tenderer. SCADL reserves the right to seek clarification during the technical bid evaluation, which also includes the further clarification / replacement of the product (if it is not meeting the criteria mentioned in the RFP).

20.15 Checklist for Technical-Qualification Document

#	Documents required	Submitted (Y / N)	(Page No.)
1.	Details of Annual Turnover and Net-worth for last three financial years (Form PQ 2)		
2.	Certificate from the Statutory auditor / CA clearly specifying the annual turnover from ICT / surveillance business and Net-worth for the specified years (Form PQ 3).		

#	Documents required	Submitted (Y / N)	(Page No.)
3⋅	Details of similar work undertaken for showcasing product experience (PQ 4,5,6,7 & TQ-2,3,4,5)		
4.	Authorization letter from OEMs (Form PQ 10)		
5. 6.	Bidder and OEM's Undertaking related to the land border sharing declaration of proposed products and OEMs. (PQ 11) Proposed design and technical solution to meet the scope		
	of work of the project.		
7.	Details of the application software proposed		
8.	Integration approach with existing Infrastructure		
9.	Strength of the Bidder to provide services including examples or case-studies of similar solutions deployed forother clients		

20.16 PQ - 10 : MAF

Manufacturer's Authorization Format (MAF) From OEM

Ref:	Date:
To	
The Chief Executive Officer	
Smart City Ahmedabad Development Limited	
Command and Control Centre,	
Opp. Divan Ballubhai School,	
Nr. Sanskar Kendra, Paldi,	
Ahmedabad: 380007.	
Subject: Manufacturer Authorization Letter for RFP No	
Sir,	
We, <oem name=""> having our registered office at <oem address<="" td=""><td>ess>, hereinafter referred to a</td></oem></oem>	ess>, hereinafter referred to a
OEM are an established manufacturer of the following items que	oted by <bidder name=""> having</bidder>
their registered office at <bidder address="">, hereinafter referred to</bidder>	o as Bidder.
Item – 1:	

We <OEM Name> authorize <Bidder's name> to quote our above-mentioned product for above mentioned tender.

We confirm that we have understood the delivery & installation timelines defined in the tender. We confirm that we have worked out all necessary logistics and pricing agreement with **<Bidder name>**, and there won't be any delay in delivery, installation and support due to any delay from

our side. Our full support is extended in all respects for supply, warranty and maintenance of our products. We also ensure to provide the required spares and service support for the supplied equipment as per tender terms. In case of any difficulties in logging complaint at bidder end, user shall have option to log complaint at our call support Centre.

We hereby declare that the proposed product complies with all the specifications defined and desired in this RFP and subsequent corrigenda.

We herewith certify that the Products/ Equipment/ Solutions quoted by us are not end of the life and we hereby undertake to support this Products/ Equipment/ Solutions for the duration of minimum 5 years from the date of Submission of the Bid.

Sr. No.	Name of Products/ Equipment/ Solution as per RFP	Proposed Products/ Equipment/ Solution with brand, model & part number	OEM warranty	Remarks

Yours faithfully,

Authorized Signatory

Designation

OEM's company name

CC: Bidder's corporate name

NOTE:

1. The letter should be submitted on the letter head of the manufacturer / OEM and should be signed by the authorized signatory.

20.17 PQ 11: Land border sharing declaration

Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020

(To be submitted by Bidder & Consortium member on 300 Rs Stamp paper)

To,

The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City.

Dear Sir,				
Mr	undersigned	authorized	representative	of M/s
<< Name of Company>> has read	clause regarding restr	riction on pro	ocurement from	a bidder
of a country which shares a land bord	ler with India.	_		

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that quoted product from following OEMs are not from such a country or, of if from such a country, these quoted products OEM have been registered with competent authority. I hereby certify that these quoted products & its OEM fulfils all requirements in this regard and is eligible to be considered for procurement for RFP" Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City".

If given information is found to be false, this would be ground for immediate termination and further legal action in accordance with law.

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

Authorized Signatory:

Name:

Designation:

Name of the Bidder/OEM:

Address:

Company Seal:

(On Letter Head of OEM)

_	
•	٠.
	LV.

The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City.

Mr	undersigned	authorized	representative	of	M/s.
<< Name of Company>> has read claus	e regarding res	striction on p	procurement from	n a l	bidder
of a country which shares a land border wit	th India.				

I certify that following quoted product is not from such a country or, of if from such a country, these quoted product(s) & we as OEM has been registered with competent authority. I hereby certify that this quoted product(s) fulfill all requirements in this regard and is eligible to be considered for procurement for RFP" Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam with advanced analytics for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City".

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

No.	Item Category	Quoted Make & Model
N		

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

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the OEM Organization)

Name :
Designation :
Date :
Company Seal :
Business Address :

20.18 TQ 6: CVs of the Key Manpower proposed

Name of the Staff				
Current Designationin the Organization				
Proposed Role in the Project				
Project				
Date of Birth				
Education	Degree / Diploma, C	College, University	, Year of Passing	
Summary of Key Training and Certifications				
	Language	Reading	Writing	Speaking
Language Proficiency				
Language 1 Tomerency				
	From / To:			
	· ·			
2 0				
`				
-	·			
	* *			
	,			
experience near				
Total No. of Voors of	Position Heid:			
-				
_				
Highlights of relevant following		dled and signific	ant accomplishn	nents (Use
	Current Designationin the Organization Proposed Role in the Project Proposed Responsibilities in the Project Date of Birth Education Summary of Key Training and Certifications Language Proficiency Employment Record (For the total relevantexperience, Month and Year to be mentioned in each of the experience field) Total No. of Years of Work Experience Total No. of Years of Experience for theRole proposed Highlights of relevant following	Current Designation in the Organization Proposed Role in the Project Proposed Responsibilities in the Project Date of Birth Education Degree / Diploma, One of the total relevant experience, Month and Year to be mentioned in each of the experience field) Total No. of Years of Work Experience Total No. of Years of Experience for the Role proposed Highlights of relevant assignments hand	Current Designation the Organization Proposed Role in the Project Proposed Responsibilities in the Project Date of Birth Education Degree / Diploma, College, University Summary of Key Training and Certifications Language Proficiency Employment Record (For the total relevantexperience, Month and Year to be mentioned in each of the experience field) From / To: Employer: Position Held:	Current Designation the Organization Proposed Role in the Project Proposed Responsibilities in the Project Date of Birth Education Degree / Diploma, College, University, Year of Passing Summary of Key Training and Certifications Language Proficiency Employment Record (For the total relevantexperience, Month and Year to be mentioned in each of the experience field) Total No. of Years of Work Experience Total No. of Years of Experience for the Role proposed Highlights of relevant assignments handled and significant accomplishm following

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

Note: Bidder to provide exact duration during which the work was undertaken by the proposed resource.

20.19 Bidder's Total Responsibility Certificate

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

To,

The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City.

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

Dear Sir,

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

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

Name of the Bidder :

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

Notes:

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

20.20 No Deviation Certificate

(To be provided on the Company letter head of the Lead Biddder)

To,

The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City.

Ref: RFP No. <<....>> dated <<>>

Dear Sir,

- a. This is to certify that, the specifications of all the components Hardware, Software, surveillance components, solutions, IT & Non-IT equipment and any other item as per BoQ, which I/ We have mentioned in the Technical bid, and which I/ We shall supply if I/ We am/ are awarded with the work, are in conformity with the minimum specifications of the bidding document and that there are no deviations of any kind from the requirement specifications.
- b. Also, I/ we have thoroughly read the tender and by signing this certificate, we hereby submit our unconditional acceptance to all the terms & conditions of the bidding document without any deviations.
- c. I/ We also certify that the price I/ we have quoted is inclusive of all the cost factors involved in the end-to-end implementation and execution of the project, to meet the desired Standards set out in the bidding Document.

Than	kinσ	VOII
IIIaii	wii 8	you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name :

Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City Designation Date Company Seal **Business Address** Address: Seal: Date: 20.21 : Self Declaration by Bidder on Data Centre Equipment <<To be printed on letter head of Lead Bidder and signed by Authorized signatory of Bidder>> To, The Chief Executive Officer Smart City Ahmedabad Development Limited Command and Control Centre, Opp. Divan Ballubhai School, Nr. Sanskar Kendra, Paldi, Ahmedabad: 380007. Sub: RFP for Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System, Dashcam for surveillance of Municipal Infrastructure and Wi-Fi Internet Connectivity in Ahmedabad City. Ref: RFP No. <<....>> dated <<>> Dear Sir/ Madam, This is to undertake that We_______, (name and address of the bidder) shall procure Data Centre Server, Storage server as per the quantity mentioned in the below table during the implementation phase of the project to meet all the specification mentioned in the RFP.

RFP - Selection of Implementation Agency for SITC, Operation, and Maintenance of Surveillance System,

Sr. No.	Item	Quantity
1.	Server	
2.	Storage	

Yours faithfully,

(Signature of the Authorized Signatory from Bidder)

Name Designation Seal.	
Date:	
Place:	
Business Address:	

20.22 Unpriced Bill of Material

The Bidder should provide the proposed Bill of Material (BoM) here. Kindly note that any additional items required should be clearly mentioned under 'additional line items' category towards the end of this table. Also note that details of the make/brand and model against each line item, wherever applicable, should be mentioned. The Bidder may add any additional line item (with adequate details) in the proposed BoM table below (towards the end of the table), that may be required to fulfil the tender and project requirements in totality. Kindly note that the indicative/estimated quantity provided in the RFP would be used for evaluation purposes; however, the payment would be done on actual usage basis.

Unpriced Bill of Material for all components (Edge device, Hardware, network, Server, Storage etc.)

	Unpriced Bill of Material					
#	BoM Line Item	Unit of measuremen t	Quantity Proposed	Make / Brand	Model Details	Full Compliance with RFP Requirements (Yes / No)
1						
n						

Information about all software/Applications components being proposed

#	Software Component	Product Name version and technology		Sub- module	Function / Purpose of the line item
1					
n					
	Bidder to add lines as required				

21. Annexures

21.1 Annexure I – Technical Specifications

1. Galvanized cantilever pole

S/N	Parameter	Compliance (Yes/No)	
1.	Pole type	Galvanized pole as per IS:2629 and Fabrication as per IS:2713	·
2.	Height	 6 meter above ground surface Bottom section: 3.2 meter Middle Section: 1.4 meter Top Section: 1.4 meter 	
3.	Foundation	Minimum 1 meter; To ensure that video feed quality is not impacted due to winds in different climatic conditions and from vibration caused due to heavy vehicles on road	
4.	Pole Diameter (Outer side)	 Bottom section: 97.9mm Middle Section: 76.2mm Top Section: 65.2mm 	
5.	Bottom Base Plate	300mm x 300mm x 6mm	
6.	Protection	Lightening arrestor and Earthing	
7.	Cantilevers	 The pole should support 3 number of cantilevers of varying length from 0.5 to 2.0 meters. The cantilever should be fitted such that they can be rotated to change the direction or adjust the angle, if at all required. The Cantilever should be strong enough so as to mount at least 2 CCTV camera's and associated fixtures like IR, etc., if required. 	
8.	Mounting Facility	Should support pole, cantilever, Junction Box	

S/N	Parameter	Minimum Required Specifications	Compliance
			(Yes/No)
9.	Earthing	Separate Earthing as per IS standard provided for each pole	
10.	Cabling	All wiring must be hidden, throughtubes/pipes. No wires should be visible from outside.	
11.	General	SI is required to submit the detailed design of the pole with complete foundation approved by Government approved structural engineer. The actualdesign of pole and foundation will be based on structure stability report issued by structural engineer to sustain a wind speed of 150 KMPH. SI must propose design which is aesthetically matching with city's infrastructure and existing projects. Pole's design should be vibration freeand should not affect the performance of the system on account of any vibration on the pole.	

2. Gantry including mounting/installation

Sr No	Parameters	Minimum Specifications	Compliance (Yes/No)
1.	Pole type	Hot Dip Galvanized after Fabrication with Silver coatingof 86 micron as per IS:2629. Fabrication in accordance with IS-2713 (1980)	
2.	Height	6-10 Meters (or higher), as-per requirements for different types of cameras & Site conditions	
3.	Pole Diameter	Min. 10 cm diameter pole (Bidder to choose larger diameter for higher height / weight, also it must be supported with structural engineer certificate)	
4.	Bottom base Plate	Minimum base plate of size 30x30x1.5 cm	
5.	Mounting Facilities	To mount RLVD Cameras, ANPR cameras,IR Illuminator, etc.	

Sr No	Parameters	Minimum Specifications	Compliance (Yes/No)	
6.	Pipes, Tubes	All wiring must be hidden, through tubes/pipes. No wiresshall be visible from outside.		
7.	Foundation	Casting of Civil Foundation with GI foundation bolts, to ensure vibration free erection. (Basic aim is to ensure that video feed quality is not impacted due to winds in different climatic conditions). Expected foundation depth of min. 100cms. Proper earthing should be carried out. Bidder to submit structural design document for polefoundation and design considerations to withstand minimum 150 KMPH of wind speed.		
8.	Protection	Lightning arrester shall be provided, to protect all field equipment mounted on pole.		
9.	Paint	The structure shall be painted with one coat of primer and two coats of PU paint. Grey/silver paint or as described by Tenderer		
10.	Road Safety	Gantry should be installed with reflective taps along with consideration of road safety standards & Road Engineering		
11.	Mounting Facility	Should support Junction Box		
Spec	Specify the proposed Make			
Spec	cify the propos	sed Model		

${\it 3. Pole for surveillance cameras}$

Sr. No.	Parameter	Minimum Specifications	Compliance (Yes/No)
1	Pole type	Hot Dip Galvanized pole. The pole should be made as per IS and shall be coated with Hot Dip Galvanizing as per IS:4759, IS:2629, IS: 2633. Fabrication with Silver coating of 86 micron as per IS:2629 in accordance with IS-2713 (1980). Fabricationshould have	

Sr.	Parameter	Minimum Specifications	Compliance
No.	2 0.2 0.2.2002		(Yes/No)
		been carried out by OEM itself and at their	
		factory location only.	
		6-8 Meters (or higher), as-per-requirements	
2	Height	for different type of cameras & Site conditions.	
		Height of pole will befinalized during the	
		feasibility study. Min 70 mm Top dia x 135 mm Bottom dia x	
		4 mm thickness with suitable size of Base	
	Pole	Plate (Bidder to choose larger diameter for	
3	Diameter	higher height). Bidder may be required to	
	Diameter	amend the pole diameter based on the	
		structural design proposed by the authorized	
		structural engineer to sustain 150 KMPH of	
		wind speed	
		Cantilever arm length of minimum 1.5 meter	
4	Cantilevers	(if, required)Design must be finalized during	
		the initial phase of the project.	
		Casting of Civil Foundation with GI	
		foundation bolts (Must be corrosion free), to	
		ensure vibration free erection(basic aim is to	
	RCC	ensure that video feed quality is not impacted	
5	Foundation	due to winds in different climatic conditions).	
		The pole with cantilever should be strong enough to caterto the weight of 2 – 3 cameras	
		mounted on it.	
		mounted on it.	
		Bidder must install 40 mm	
		diameter pipe in the foundation.	
6	Protection	Lightning arrester shall be provided, to protect	
0		all field equipment mounted on pole.	
7	Junction	SI to provide suitable size of junction box for	
/	Box	termination of cables as per their proposed	
		solution All wiring must be hidden, through	
8	Cabling	tubes/pipes. No wires shall be visible from	
		outside.	

Sr. No.	Parameter	Minimum Specifications	Compliance (Yes/No)
9	Earthing	Separate Earthing as per IS standard provided for each mounting structure and lighting arrester. Earthing relateddesign should also be part of the structural engineer	
		certificate.	
10	General	SI is required to submit the detailed design of the pole with complete foundation approved by Government approved structural engineer. The actual design of pole and foundation will be based on structure stability report	

4. Power Cable

Sr. No.	Component	Minimum Specifications	Compliance (Yes/No)
	Cables		
1.	No's of core	3 Core 2.5 Sq. mm XLPE multi strand armored copper cable	
2.	Materials	XLPE (Cross Linked Polyethylene)	
3⋅	Certification	ISI Marked	
4.	Standards	IS:7098(I)-88 ISI & Indian Electricity Act and Regulation	
5.	Cable Laying	Cable must be laid as per relevant IS standard Termination should be carried out in a proper manner with lugs etc. accessories.	
6.	General	SI to submit the relevant test certificate as per IS standard	
Spec	ify the proposed	Make	
Spec	cify the proposed	Model	

Other cables required as part of the project should be armored for outdoor cabling.

5. Junction Box, with adjustable mounting frames

S/N	Parameter	Specification	Compliance (Yes/No)
1.	Built	The Outdoor Utility Cabinet will be constructed with a front sheet steel door with 3-point Locking system to ensure the security of the cabinet. Side and Wall Panels shall be thick wall constructed, with fixing bolts internal to the cabinet. The Cabinet should have the required frames to mount the required components like, network device, power, Stabilizer, surge protector etc.	
2.	Utility & IP rating	Should be Made for 24X7X365 Outdoor Applications; The Utility Cabinet shall be IP 55 rated (Regulatory Standard Compliance) for ingress protection.	
3.	Cabinet Material	GI with powder coated	
4.	Size	Suitable size as per site requirements to house the field equipment including but not limited to Edge Level Switch, etc. depending on the solution at particular junctions. SI to submit the detailed layout considering solution requirement prior to supply	
5.	PDU	Minimum 5x 5 Amp. Indian Standard PDU's has to be provided to support the site equipment. No. of PDUs should be as per actual requirement.	
6.	Installation	Each Cabinet will be mounted on a raised height Plinth, 700 - 1000 mm high, as per site requirements. FAN Cooling unit shall be inherent in the design.	
7.	Cable Management	Proper cable management with cable tagging should be provided Cable Routing: Power connection cable shall be provided from the nearest access point provided by Power utility company to the Outdoor Utility Cabinet through Power meter enclosure.	
8.	Earthing	Separate Earthing as per IS standard provided for each Junction Box	
9.	Other Features	Rain Canopy, Cable entry with glands, proper earthing and Fans/any other accessories as required for operation of equipment's within junction box	

Specify the proposed Make	
Specify the proposed Model	

${\bf 6.\,Surge\,Protection\,Power\,Strips}$

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
1.	Clamping Voltage	240 V	
2.	Response time	<10 ns	
3.	Energy Dissipation	Min 500 joules	
4.	Max voltage Spike protection	Up to 400 Volts	
5.	Max current Spike Protection	5000 Amps	
6.	Cable	Heavy duty Cable of standard Length	
7.	Power Outlet	Min. 4 Nos. 5 Amp Indian Standard Power Outlets	
8.	Operating Temperature	o-55 ° C .The bidder has to take into consideration of the internal temperature adjustment of the junction box	
Spe	cify the proposed Ma		
Spe	cify the proposed Mo		

7. Voltage Stabilizers at Junctions

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
1.	Device capacity	3 KVA	
2.	Voltage Correction	Automatic, IC Controlled	
3.	Input Voltage Range	130 V to 280 V	
4.	Frequency Range	50 Hz +/- 5 %	
5.	Output Voltage Range	200 V to 230 V, +/-5 %	
6.	Efficiency	> 95%	
7.	Protection/Cut off	Over Voltage and over Current Protection, Thermal and Electronic Overload	
8.	Warranty	5 Years comprehensive warranty with parts.	
Spec	cify the proposed Ma	ke	
Spec	cify the proposed Mo	del	

8. Camera Type A (Box Cameras for ANPR, RLVD & Speed Detection)

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
1.	Image sensor and Effective Pixels (Resolution)	1/2.8" or better, CMOS Progressive Scan & Minimum 2 MP (for ANPR & Speed Detection) and 8 MP (for RLVD) or better	
2.	Electronic Shutter	1 to 1 / 10,000 s or better	
3.	Focus	Manual	
4.	Automatic Gain Control	Automatic / Manual	
5.	S/N Ratio	>50 dB	
6.	Frame Rate	50/60 FPS for ANPR & Speed Detections Camera and 20 FPS or better for RLVD Camera at Full Resolution	
7.	Codec	H.265, or better	
8.	Multi Focal Lens	≤ 6 mm to ≥ 50 mm Lens or better (For ANPR & Speed detection Cameras) & ≤ 4.1mm to ≥ 9mm "Lower End of Focal length less than 4.1mm (3, 3.5 etc. allowed), Higher End of Focal Length more than 9 mm (10, 11, 20 etc. Allowed) (For RLVD Cameras)	
9.	Minimum Illumination	0.5 Lux (Colour) & 0.01 Lux (B/W)	
Vide	eo	·	
10.	Day and Night functionality	Automatic, Color, Mono	
11.	WDR	True WDR 120 dB or better	
12.	Video Streams	Individually configurable min 03 video streams (H.265), Unicast/ Multicast	
13.	Intelligent Video	Motion detection, Tampering Alert	
	work & Interface		
14.	Interface	RJ-45 for 10/100 base-T Ethernet	
	Network Protocols support	IPv4, IPv6, TCP/IP, HTTP, DHCP, UDP, DNS, SMTP, RTP, RTSP, SNMP protocols/Should meet all functional requirement of the project	
16.	Alarm Event (Non- working, tampering,)	Events / alerts send via FTP, HTTP, email, Pre-Post alarm video buffering.	
17.	Compliance	ONVIF Profile S,G &T compliant	
	urity	Description of the second of t	
18.	General	Password Protection, HTTPS encryption, IEEE 802.1X	
Gen	eral Camera Feature	S	

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
19.	Operational Temperature °C	o°C to 50 °C	
20.	Outer Casing	Vandal Proof IK10 or above rated, NEMA 4X/ IP66 rated Housing	
21.	Alarm	Alarm Support Required (1 Input and 1 Output)	
22.	Audio	Audio Support Required (1 Input and 1 Output)	
23.	Power	PoE (802.3 af) OR AC 24V/ DC12V	
24.	Certifications	CE/EN/Equivalent Indian Standards, FCC/Equivalent Indian Standards, /UL 62368-1/Equivalent Indian Standards, IEC/BIS/Equivalent Indian Standards certified at the time of bidding	
25.	Undertaking	The MAC ID's of the CCTV Cameras to be supplied against this tender shall be registered in the name of the OEM of the CCTV Cameras.	
26.	Local Storage should (memory card of Min 256 GB to be included)	In the event of failure of connectivity to the central server the camerashall record video internally or on the SD card automatically.	
27.	Mounting Accessories	For pole/gantry/ surface mount with L/C Brackets with bird scare spikes to prevent birds from sitting on top of camera.	
28.	Warranty	5 Years comprehensive warranty with parts.	
_	Specify the proposed Make		
Spec	cify the proposed Mode	1	

9. Camera Type B (Box Camera for Surveillance)

S/N	Parameter		Compliance (Yes/No)
1.	Image sensor and EffectivePixels (Resolution)	1/ 3" or better, CMOS Progressive Scan & Minimum 2 MP or better	
2.	Electronic Shutter	1 to 1 / 10,000 s or better	

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
3.	Focus	Automatic and Manual both	
4.	Automatic Gain Control	Automatic / Manual	
5.	S/N Ratio	> 50 dB	
6.	Frame Rate	25/30 FPS for 1920 x 1080	
7.	Codec	H.265, or better	
8.	Multi Focal Lens	≤6 mm to ≥50 mm lens or better	
9.	IR	External IR with minimum 50 mtr Range	
10	Minimum Illumination	Colour: 0.1 lux, B/W: 0.01 lux (at 50 IRE), IR: 0 lux	
Vide		IK. O IUX	
10.	Day and Night	Automatic, Color, Mono	
	functionality Video Resolution	Minimum a MD (1000 v 1000) on Potton	
11.	WDR	Minimum 2 MP (1920 x 1080) or Better True WDR 120 dB or better	
12.			
13.	Video Streams	Individually configurable minimum 03 video streams (H.265),	
	T , 11' , 57' 1	Unicast/ Multicast	
14.	Intelligent Video	Motion detection, Tampering Alert	
	work & Interface	DI C / l mpl	
15.	Interface	RJ-45 for 10/100 base-T Ethernet	
16.	Network Protocols support	IPv4, IPv6, TCP/IP, HTTP, DHCP, UDP, DNS, SMTP, RTP, RTSP, SNMP protocols/Should meet all functional requirement of the project	
17.	Alarm Event	Events / alerts send via FTP, HTTP, email, Pre-Post alarm video buffering.	
18.	Compliance	ONVIF Profile S,G &T compliant	
Secu	irity		
19.	General	Password Protection, HTTPS encryption, IEEE 802.1X	
Gen	eral Camera Feature	S	
20.	Operational Temperature °C	o°C to 50 °C	
21.	Outer Casing	Vandal Proof IK10 or above rated, NEMA 4X /IP66 rated Housing	
22.	Alarm	Alarm Support Required (1 Input and 1 Output)	
23.	Audio	Audio Support Required (1 Input and 1 Output)	
24.	Power	PoE (802.3 af) OR AC24V/ DC12V	
25.	Certifications	CE/EN/Equivalent Indian Standards, FCC/Equivalent Indian Standards, /UL /Equivalent Indian Standards, IEC/BIS/Equivalent Indian Standards certified at the time of	

S/N	Parameter		Compliance (Yes/No)
		bidding	
26.			
	Undertaking	The MAC ID's of the CCTV Cameras to be supplied against this tender shall be registered in the name of the OEM of the CCTV Cameras.	
27.	Local Storage should (memorycard of Min 256 GB to be included)	In the event of failure of connectivity to the central server the camera shall record video internally or on the SD card automatically.	
28.	Mounting Accessories	For pole/gantry/ surface mount with L/C Brackets with bird scare spikes to prevent birds from sitting on top of camera.	
29.	Warranty	5 Years comprehensive warranty with parts.	
Specify the proposed Make			
Spec	ify the proposed Mode	l	

10. Camera Type C: PTZ

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
1.	Sensor	1/3" CMOS & Minimum 2 MP	
2.	Min. Illumination	Color: 0.5 lux 0.01 lux with IR or better	
3.	Scanning System	Progressive	
4.	S / N Ratio	>50dB	
5.	IR Distance	Internal/ External with min 150 meters coverage	
6.	IR Intensity	Automatically Adjust	
7.	IR on/Off Control	Auto	
8.	WDR	True WDR 120 db or better	
Len	S		
9.	Optical Zoom	30X or better	
10.	Focal Length	5 to 150mm or Better (The minimum required optical zoom is 30 X)"Lower end of focal length from 4.3 mm to 5 mm will be allowed, Higher end of focal length from 129 mm to 150 mm will be allowed"	
11.	Focus Control	Auto/Manual	

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
Pan	Tilt Zoom		
12.	Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 90°, auto flip 180°	
13.	Manual Control Speed	Pan: 0.1° ~160° /s; Tilt: 0.1° ~120° /s	
14.	Preset Speed	Pan: 240° /s; Tilt: 160° /s	
15.	Presets	Minimum 150 Preset Points	
Vide	eo		
16.	Compression	H.265 or better	
17.	Streaming Capability	Individually configurable minimum 03 video streams (H.265 or better)	
18.	Resolution	1080 P of Better	
19.	Frame Rate	1080P (1 ~ 25/30fps)	
20.	Day and Night	Automatic, Color, Mono	
21.	White Balance	Auto / Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp	
22.	Noise Reduction	Ultra DNR (2D/3D)	
23.	Motion Detection	Required	
24.	Region of Interest	Required	
25.	Digital Zoom	16X or better	
Net	work		
26.	Ethernet	RJ-45 (10/100Base-T)	
27.	Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP,	
28.	Interoperability	ONVIF Profile S,G &T compliant	
29.	Streaming Method	Unicast / Multicast	
30.	Local Storage should (memory card of Min 256 GB to be included)	In the event of failure of connectivity to the central server the camerashall record video locally on the SD card automatically.	
31.	Certification	CE/EN/Equivalent Indian Standards, FCC/Equivalent IndianStandards, /UL /Equivalent Indian Standards, IEC/BIS/Equivalent Indian Standards certified at the time of bidding	
32.			
	Undertaking	The MAC ID's of the CCTV Cameras to be supplied against this tender shall be registered in the name of the OEM of the CCTV Cameras.	
33.	Power	PoE /+(802.3 af/at) OR AC 24V/ DC12V/	
00.		, (0,	

S/N	Parameter	Minimum Specification	Compliance (Yes/No)
		100- 230VAC	
Gen	General		
34.	Working Temperature / Humidity	o°C to 55 °C, 80% RH non-condensing within enclosure	
35.	Security	Password Protection, HTTPS encryption, IEEE 802.1X	
36.	Alarm	Alarm Support Required (1 Input and 1 Output)	
37.	Audio	Audio Support Required (1 Input and 1 Output)	
38.	IP Rating	Vandal Proof IK10 or above rated, NEMA 4X /IP66 rated Housing	
39.	Mounting Accessories	For pole and surface mount with L/C Brackets	
40.	Warranty	5 Years comprehensive warranty with parts.	
Spec	cify the proposed Make		
Spec	cify the proposed Mode	l	

11. External IR Illuminator

S/N	Parameter	Specification	Compliance
			(Yes/No)
1.	Range	Min. 100 meters, with adjustable angle to	
		cover the complete field of view at specified	
		locations	
2.	Minimum illumination	Hight Sensitivity @o Lux	
3.	Angle of Mounting	Adjustable	
4.	General	External Illuminator with visibility should	
		be at least 50m. Illumination (Color & b/w)	
		should be sufficient to capture	
		Objects/Faces at night time when there is	
		not sufficient illumination at site.	
5.	Power	DC (12V/24V) / AC (100-270V), Auto	
		on/off	
6.	Casing	IP 66 and IK10 Rated	
7.	Operational Temperature	o°C to 55 °C	
8.	Certification	CE/EN/Equivalent Indian Standards,	
		FCC/Equivalent Indian Standards, at	
		the time of bidding	
Specify the proposed Make			
Spec	cify the proposed Mode	1	

12. Outdoor 8 Port Managed L2 Switch with Fiber Port

S/N	Minimum Specification	Compliance (Yes/No)
1.	• Minimum 8 No's 10/100/1000 Base-Tx, PoE+ ports (Minimum 30 W per port) and minimum 2x 1G SFP Ports loaded with SFPs	
	• Ethernet Ports (10/100/1000 Base-Tx, POE ports) can be used to connect one switch to another (Cascading Switches) by simply using an Ethernet cable	
2.	All ports should have features of auto- negotiate, flow control (802.3x), port-based network access control (802.1x), port security, MAC filtering etc.	
3.	Minimum Switching capacity of 8 Gbps or more	
4.	Should be IPv4 and IPv6 ready from day one	
5.	Should have IGMP snooping v1,2 & 3 supporting min 100 multicast groups	
6.	Features of DHCP Relay NTP or equivalent, SNMPv1, v2 & v3, TELNET/ SSH,	
7.	Should have console port for administration & management, CLI and web-based GUI for easy management	
8.	Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP), Should support Ring protection, Should support Loop protection and Loop detection, STP,RSTP	
9.	Port Security to secure the access to a port based on the MAC address of a user's device. The aging feature to remove the MAC address from the switch after a specific time to allow another device to connect to the same port.	
10.	Multilevel security on console access to prevent unauthorized users from altering the switch configuration.	
11.	Port-based and 802.1Q tag-based VLANs, Guest VLAN, Private VLAN	
12.	All necessary SFP's, interfaces, connectors, patch cords (if any) & licenses must be delivered along with the switch from day one	
13.	Web/SSL, Telnet server/SSH, ping, traceroute, Simple Network Time Protocol (SNTP)/NTP, Trivial File Transfer Protocol (TFTP), SNMP, RADIUS, syslog, DNS client	
14.	Duplicate address detection (DAD)	
15.	Operating Temperature: o°C to 70°C	
16.	10 % to 90 % RH, non-condensing	
17.	Form factor- DIN rail mount	
18.	5 Years of Comprehensive Warranty from OEM	
Spec	fy the proposed Make	
Spec	ify the proposed Model	

13. Indoor 8 Port Managed L2 Switch with Fiber Port

S/N		Compliance (Yes/No)		
1.	• Minimum 8 No's 10/100/1000 Base-Tx, PoE+ ports (Minimum 30	(Tes/NU)		
1.	W per port) and minimum 2x 1G SFP Ports loaded with SFPs			
	Ethernet Ports (10/100/1000 Base-Tx,POE ports) can be used to			
	connect one switch to another (Cascading Switches) by simply using			
	an Ethernet cable			
2.	All ports should have features of auto-negotiate, flow control			
	(802.3x), port-based network access control (802.1x), port security, MAC filtering etc.			
3.	Minimum Switching capacity of 8 Gbps or more			
4.	Should be IPv4 and IPv6 ready from day one			
5.	Should have IGMP snooping v1,2 & 3 supporting min 100 multicast groups			
6.	Features of DHCP Relay NTP or equivalent, SNMPv1, v2 & v3, TELNET/ SSH,			
7.	Should have console port for administration & management, CLI and web-based GUI for easy management			
8.	Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP), Should support Ring protection, Should support Loop protection and Loop detection			
9.	Port Security to secure the access to a port based on the MAC address of a user's device. The aging feature to remove the MAC address from the switch after a specific time to allow another device to connect to the same port.			
10.	Multilevel security on console access to prevent unauthorized users from altering the switch configuration.			
11.	Port-based and 802.1Q tag-based VLANs, Guest VLAN, Private VLAN			
12.	All necessary SFP's, interfaces, connectors, patch cords (if any) & licenses must be delivered along with the switch from day one			
13.	Web/SSL, Telnet server/SSH, ping, traceroute, Simple Network Time Protocol (SNTP)/NTP, Trivial File Transfer Protocol (TFTP), SNMP, RADIUS, syslog, DNS client			
14.	Duplicate address detection (DAD)			
15.	Operating Temperature: o°C to 50°C			
17.	Form factor- DIN rail mount			
18.	5 Years of Comprehensive Warranty from OEM			
Spec	Specify the proposed Make			
Spec	ify the proposed Model			

14. 42U Server Rack for DC

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
1.	Dimension	Rack Width: 600mm	
		Rack Depth/Length: 1000 mm to 1070 mm	
2.		Rack Height : 42U	
3.		Color: Black	
4.		Rack Equipment Mounting should be as per EIA-310 standard: 19" along with 'U' marking.	
5.		Rack should have minimum weight carrying Capacity of 500Kgs.	
6.	Doors	Front and Back doors should be perforated with at least 60% or higher perforations	
7.		The racks must have steel (solid / grill / mesh) front / rear doors and side panels. Racks should NOT have glass doors / panels. Front & Back door should be lockable utilizing a single key with the doors.	
8.		Rack should have single front door and it should be able moved to the opposite side or interchanged with rear doors. Doors should be able to be removed easily with simple lift-off design.	
9.		Rack should have Split rear doors to improve access and serviceability to rear of rack mounted equipment.	
10.	Side Panels	Side Panels should be of Half-height on each side for easy access.	
11.		Side panels should be lockable utilizing a single key with the doors.	
12.	Cable access	It should have cable access slots in the roof for overhead cable egress.	
13.		It should have unobstructed cable access from bottom of the Rack through a raised floor.	

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
14.	Wire managers	Two vertical wire/cable managers/panels should be provided in front and back of the rack for cable management.	
15.	Power Distribution Units	Rack must be supplied with 2 x PDUs per Rack - 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 32AMPS MCB, 5 KV AC isolated input to Ground & Output to Ground.	
16.		All types of Power Cables (like C13 to C14, e.t.c.) required to power up the various Network/Server devices should be supplied/provided with it from day one.	
17.	Hardware/Accessories provided	Rack must be supplied with minimum 2 (two) nos of standard hardware pack/bag (which includes mounting nut-bolts, cable ties e.t.c) for mounting IT equipment and tools for enclosure adjustment.	
18.		Pre-installed full-enclosure height Integrated and adjustable rear accessory channel to accommodate PDUs and vertical cable organizers.	
19.		Rear accessory channel should be able to move to other locations of the enclosure along the side brace to resituate cable management as per requirement.	
20.		Minimum 2 x 1U Mountable Cable Manager and maximum as per site requirement needs to be supplied from Day one.	
21.	Fans and Fan Tray	Fan 90CFM 230V AC, 4" diameter (4 Nos. per Rack)	
		Fan Housing Unit 4 Fan Position (Top Mounted) (1 no. per Rack) - Monitored - Thermostat based - The Fans should switch on based on the Temperature within the rack. The temperature setting should be factory settable. This unit should also include - humidity & temperature sensor	

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
22.	Warranty	5 Years repair or replacement comprehensive warranty with parts.	
23.	Specify the proposed Make		
24.	Specify the proposed M	Specify the proposed Model No	

15. 42U Network Racks for DC

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
1.	Dimension	Rack Width: 750-800mm	
		Rack Depth/Length: 1000 mm to 1070 mm	
2.		Rack Height : 42U	
3.		Color: Black	
4.		Rack Equipment Mounting should be as per EIA-310 standard: 19" along with 'U' marking.	
5.		Rack should have minimum weight carrying Capacity of 500Kgs.	
6.	Doors	Front and Back doors should be perforated with at least 60% or higher perforations	
7.		The racks must have steel (solid / grill / mesh) front / rear doors and side panels. Racks should NOT have glass doors / panels . Front & Back door should be lockable utilizing a single key with the doors.	
8.		Rack should have single front door and it should be able moved to the opposite side or interchanged with rear doors. Doors should be able to be removed easily with simple lift-off design.	
9.		Rack should have Split rear doors to improve access and serviceability to rear of rack mounted equipment.	
10.	Side Panels	Side Panels should be of Half-height on each side for easy access.	
11.		Side panels should be lockable utilizing a single key with the doors.	

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
12.	Cable access	It should have cable access slots in the roof for overhead cable egress.	
13.		It should have unobstructed cable access from bottom of the Rack through a raised floor.	
14.	Wire managers	Two vertical wire/cable managers/panels should be provided in front and back of the rack for cable management.	
15.	Power Distribution Units	Rack must be supplied with 2 x PDUs per Rack - 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 32AMPS MCB, 5 KV AC isolated input to Ground & Output to Ground.	
16.		All types of Power Cables (like C13 to C14, e.t.c.) required to power up the various Network/Server devices should be supplied/provided with it from day one.	
17.	Hardware/Accessories provided	Rack must be supplied with minimum 2 (two) nos of standard hardware pack/bag (which includes mounting nut-bolts, cable ties e.t.c) for mounting IT equipment and tools for enclosure adjustment.	
18.		Pre-installed full-enclosure height Integrated and adjustable rear accessory channel to accommodate PDUs and vertical cable organizers.	
19.		Rear accessory channel should be able to move to other locations of the enclosure along the side brace to resituate cable management as per requirement.	
20.		Minimum 2 x 1U Mountable Cable Manager and maximum as per site requirement needs to be supplied from Day one.	
21.	Fans and Fan Tray	Fan 90CFM 230V AC, 4" diameter (4 Nos. per Rack) Fan Housing Unit 4 Fan Position (Top	
		Mounted) (1 no. per Rack) - Monitored - Thermostat based - The Fans should switch	

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
		on based on the Temperature within the rack. The temperature setting should be factory settable. This unit should also include - humidity & temperature sensor	
22.	Warranty	5 Years repair or replacement comprehensive warranty with parts.	
23.	Specify the proposed Make		
24.	Specify the proposed Me		

16. Storage (For Applications)

S/N	Parameter	Minimum Specification	Compliance (Y / N)
1	Storage	Solution should be IP Based/iSCSI/FC/FCOE/NFS/CIFS Storage Capacity:5 TB (Usable, after RAID Configuration) Disks should be minimum of 6 TB capacity Active-Active Load Balancing Storage Controllers with 64GB Cache from day one and scalable up to 128GB Cache without replacing existing Controllers Front End: Minimum 8 x 10Gbps FC/FCoE ports for host connectivity scalable to 16 ports To store all types of data (Data, Voice, Images, Video, etc.) Storage should support all industry standard RAID type The proposed Storage should have 6 Gbps Drives (SSD, SAS & NL-SAS) or higher. Modular design to support controllers and disk drives expansion Should be Rack Mountable The controllers / Storage nodes should be upgradable without any disruptions/ downtime 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	
		A single command console for entire storage system	

S/N	Parameter	Minimum Specification	Compliance (Y / N)
		Should have the functionality of performance, utilization monitoring of storage, disk drives and management software	
		The storage array must have complete cache protection mechanism either by de-staging data to disk or providing complete cache data protection with battery backup for minimum 4 hours	
		Controllers shall be active-active so that a single logical unit can be shared across all offered controllers, while supporting all the major functionalities like Thin Provisioning, Data tiering	
		The storage should have no single point of failure on components like controllers, disks, cache memory, I/O Ports, Power supply, Fan, etc.	
2	SAN Switch	Equivalent no. of port SAN switch with 10G port Compatible with the Storage	
3.	Warranty	5 Years comprehensive warranty from OEM	

17. Storage (for Video's)

S/N	Parameter	Minimum Specification	Compliance (Y/N)
1.	, , ,	Storage Period: 30 days Storage Capacity: 3 PB	
		Bidder shall provide the appropriate Storage Solution to meet the Project Requirements. Solution proposed should yield low cost per TB, while meeting the required performance parameters.	
		Bidder is expected to carry out the video storage requirement estimation and supply as per the solution proposed. 3 PB storage requirement to be considered as benchmark requirement considering standard calculations for 1080p resolution, 25 FPS video footages for 30 days.	
		Bidder is expected to do Installation, configuration, monitoring and management of the storage system inaccordance to the application requirement.	
2.	Hardware platform	Rack mounted form factor	
	•	Modular design to support controllers and disk drives expansion	

Parameter	Minimum Specification	Compliance (Y / N)
Controllers	At least 2 Controllers in active/active mode and upgrade up to 8 controller pairs either in same chassis or with federation of arrays to deliver higher scalability and performance.	(1/11)
	The controllers / Storage nodes should be upgradable seamlessly, without any disruptions / downtime to production workflow for performance, capacity enhancement and software / firmware upgrades.	
	Storage to be Unified Storage solution (combination of NAS and SAN storage) supporting all required protocols (IP Based/iSCSI/FC/NFS/CIFS etc.) for the Video Footages.	
RAID support	Latest RAID standards with protection against dual disk failure and multiple spare disks to cater to the Disk failure.	
	Should support various RAID levels to meet the SLA requirements.	
	Configuration of SAN shall include activities such as management of storage space, volume, RAID configuration, LUN, zone, security, business continuity volumes, performance, etc	
Cache	Minimum 256 GB of useable System memory /cacheacross all controllers. If cache is provided in any additional hardware for the storage solution, then cache must be over and above 256GB.	
Redundancyand High availability	The Storage System should be able to protect the dataagainst single point of failure with respect to hard disks, connectivity interfaces, fans, and power supplies	
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.	
	RAID support Cache Redundancyand High availability Management	upgrade up to 8 controller pairs either in same chassis or with federation of arrays to deliver higher scalability and performance. The controllers / Storage nodes should be upgradable seamlessly, without any disruptions / downtime to production workflow for performance, capacity enhancement and software / firmware upgrades. Storage to be Unified Storage solution (combination of NAS and SAN storage) supporting all required protocols (IP Based/iSCSI/FC/NFS/CIFS etc.) for the Video Footages. RAID support Latest RAID standards with protection against dual disk failure and multiple spare disks to cater to the Disk failure. Should support various RAID levels to meet the SLA requirements. Configuration of SAN shall include activities such as management of storage space, volume, RAID configuration, LUN, zone, security, business continuity volumes, performance, etc Cache Minimum 256 GB of useable System memory / cacheacross all controllers. If cache is provided in any additional hardware for the storage solution, then cache must be over and above 256GB. Redundancyand High availability The Storage System should be able to protect the dataagainst single point of failure with respect to hard disks, connectivity interfaces, fans, and power supplies 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.

S/N	Parameter	Minimum Specification	Compliance (Y/N)
		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. Creation of required number of VLUNs to optimize the speed and storage of data. The VLUNs created would also ensure segregation of the data as per the application requirement. The VLUNs should be dynamically configurable for the space allocation. Management of storage environment to maintain performance at desired optimum levels. Development of storage management policy,	
		configuration and management of disk array, SAN fabric / switches, virtual Storage, etc.	
8.	Data protection	The storage array must have complete 256 GB cache protection mechanism either by de-staging data to disk or providing complete cache data protection with battery backup for up to 4 hours	
9.	Licensing	There should not be any additional license requirements arising in future during capacity augmentation of the Storage solution. The proposed Storage should be scalable by merely adding the desired number of HDDs and Disk Enclosures in future along with necessary connecting backend/front-end cables till the maximum scalability is reached within the proposed Appliance.	
10	Data availability	Proposed storage solution should provide the data availability of 99.99%	
11.	Security	Storage must support file protection against accidental, premature malicious deletion and modification of data using file locking mechanism.	
12	Application data and video data	Application data (block data) should be on SSD/SAS and Video data (File data) should be an SAS/NL-SAS	

S/N	Parameter	Minimum Specification	Compliance (Y/N)		
13	Warranty	5 Years of Comprehensive Warranty from OEM			
Spec	Specify the proposed Make				
Spec	Specify the proposed Model				

18. Blade Chassis and Server

S/N.	Minimum Specifications	Compliance (Y/N)
	M' ' (II ' 1' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(1/14)
1.	Minimum 6U size or higher, rack-mountable, capable of	
	accommodating minimum 8 or higher hot pluggable blades	
2.	Dual network connectivity of 10 G speed or higher for each blade server	
	for redundancy shall be provided	
3.	Backplane shall be completely passive device. If it is active, dual	
	backplane shall be provided for redundancy.	
4.	Have the capability for installing industry standard flavours of	
	Microsoft Windows, and Enterprise RedHat Linux OS	
5.	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	
	virtualization.	
6.	DVD ROM shall be available in chassis, can be internal or external,	
	which can be shared by all the blades allowing remote installation of	
	software	
7.	Minimum 1 USB port	
8.	Two hot-plug/hot-swap, redundant 10 Gbps Ethernet or FCoE module	
	with minimum 16 ports (cumulative), having Layer 2/3 functionality.	
	If little in the interest of the control of the con	
	If bidder is offering FCoE based solution, corresponding ports must be	
	present in server as well as storage controller.	
9.	Two hot-plugs/hot-swap redundant 16 Gbps Fibre Channel module for	
	connectivity to the external Fibre channel Switch and ultimately to the	
10	Storage device Power gypplies shall have N. N. (Het Swen / Het Plus). All never	
10.	Power supplies shall have N+N (Hot Swap/Hot Plug). All power supplies modules shall be populated in the chassis.	
	Required number of PDUs and power cables, to connect all blades,	
	Chassis to Data Centre power outlet.	
11.	Hot pluggable/hot-swappable redundant cooling unit	
12.	Provision of systems management and deployment tools to aid in blade	
	server configuration and OS deployment	
13.	Blade enclosure shall have provision to connect to display	
	<u> </u>	

S/N.	Minimum Specifications	Compliance (Y/N)
	console/central console for local management such as troubleshooting, configuration, system status/health display.	
14.	Single console for all blades in the enclosure, built-in KVM switch or Virtual KVM features over IP	
15.	Dedicated management network port shall have separate path for remote management.	
16.	5 Years of Comprehensive Warranty from OEM	
Specify the proposed Make		
Speci		

Blade Server

Sr. No.	Parameter	Specifications	Compliance (Y/N)
1.	Processor	Latest series/generation x86 processor(s) with ten or highercores Processor speed should be minimum 2.6 GHz Minimum 2 processors per each physical server	
2.	Blade Chassis	Compatible to support the network and applicationinfrastructure	
3.	RAM	Minimum 256 GB Memory per physical server	
4.	Internal Storage	2 x 900 GB SAS (10k rpm) hot swap disk	
5.	Network interface	2 X 10Gbps ports for providing Ethernet connectivity 2 X Dual-port 10Gbps FC/FCoE/HBA for providing FCconnectivity	
6.	Power supply	Dual Redundant Power Supply	
7.	RAID support	As per requirement/solution	
8.	Operating System	Licensed latest version of Linux//Microsoft® Windowsbased Operating system	
9.	Form Factor	Blade server	
10.	Virtualization	Shall support Industry standard virtualization hypervisorlike Hyper-V, VMWARE, and Citrix etc.	

11.	Warranty	5 Years of Comprehensive Warranty from OEM				
Specify th	Specify the proposed Make					
Specify th	Specify the proposed Model					

19. DC Core Router

S/N	Minimum Specification	Compliance (Y/N)
1	Router should have redundant controller cards and should support	,
	stateful switch over, Nonstop forwarding and Nonstop routing.	
0	In case of failure of any single route processor, none of the traffic	
2	should be impacted.	
3	Router should support capacity of minimum 120 Gbps.	
4	Router should support 4000 MAC addresses or more, 10K or more	
4	multicast routes	
5	Router should support Redundant Power Supply from day one.	
6	Router must support TCP/IP, PPP	
7	Router should support IPv4 and IPv6 from day one	
	Router should support all standard routing protocols like BGP,	
8	MBGP, OSPF v2/v3, IS-IS, RIP/RIPv2, static routes, MPLS (L2 &	
	L3), PIM (v1, v2), IGMP (v1, v2, v3), Ipv6 tunneling, NAT, NTP, etc.	
9	Router should support High Availability (VRRP, or equivalent	
9	protocol, etc.)	
10	Router should support QoS (DSCP, CoS), marking, classification and	
10	Policing	
11	Router should support Traffic Engineering & MPLS-TE with FRR	
	Router should have a dedicated OOB Management port using	
12	CLI(SSH)/ WebUI (SSL) or equivalent function in EMS, SNMP (v1,	
	v2, v3), TFTP, etc.	
13	Router should support AAA features using TACACS+/Radius/LDAP,	
	etc.	
14	Router should be supplied with at least 18x10G ports and scalable to	
	additional 6x10G ports	
15	All necessary SFP's, interfaces, connectors, patch cords (if any) must	
	be delivered along with the router from day one.	
16	The Router should be supplied with Indian Standard power cables.	
18	The Router should be supplied with all applicable Licenses from day	
	one.	

S/N	Minimum Specification	Compliance (Y/N)
19	Should support proposed SDDC and SDN Solution.	
20	5 Years of Comprehensive Warranty from OEM	
21	Specify Make of proposed DC Core Router	
22	Specify Model of proposed DC Core Router	

20. DC Core L3 switch at ICCC

S/N	Parameter	Minimum Specifications	Compliance Yes/No
1	Ports	 36*10G, 12*1G and extra 4 Nos of 10G Base SX/LX/LR ports as per network solution offered. TX/FX Split as per field/site requirement All ports can auto-negotiate between 10Mbps/100Mbps/1000Mbps/10Gbps, half-duplex or full duplex and flow control for half-duplex ports. All necessary SFP's, interfaces, connectors, patch cords (if any) & licenses must be delivered along with the switch from day one. 	
2	Switch type	Layer 3	
3	MAC	16K or more	
4	Backplane Min 480 Gbps, properly sized Switching fabric capacity (as per network configuration to meet performance requirements of wire speed switching for the connected devices)		
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	 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 up to 1024 VLANs Support IGMP Snooping and IGMP Querying Support Multicasting 	

S/N	Parameter	Minimum Specifications	Compliance Yes/No		
		Should support Loop protection and Loop detection,			
8	Access Control	 Support port security Support for MAC filtering. Should support TACACS+/RADIUS authentication 			
9	VLAN	Support 802.1Q Tagged VLAN and port based VLANs			
10	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 			
11	Management	 Switch needs to have console port for management via PC Must have support SNMP v1, v2 and v3 Should support RMON Should have accessibility using SSH, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI based software utility interface 			
12	General	Should support proposed SDN solution			
13	Warranty	• 5 Years of Comprehensive Warranty from OEM			
14	Specify Make of proposed L3 Network switch				
15	Specify Model of proposed L3 Network switch				

21. 48 port Layer 2 Switch (Access/Aggregation/TOR/Server Farm Switch)

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
1.	Ports	 Layer 2 Switch with minimum 24x10G port and 24x1G ports All ports can auto-negotiate between 10Mbps/ 	
		100Mbps/ 1000Mbps/10Gbps, half-duplex or full duplex and flow control for half-duplex ports.	

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
		• All necessary SFP's, interfaces, connectors, patch cords (if any) & licenses must be delivered along with the switch from day one.	
2.	Switch type	Layer 2	
3.	MAC	8 K or more	
4.	Backplane	100 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 Mbps or better	
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	 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 	
9.	Access Control	 Support port security Support 802.1x (Port based network access control). Support for MAC filtering. Should support TACACS+/RADIUS authentication 	
10.	VLAN	Support 802.1Q Tagged VLAN and port based VLANs	
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 console port for management via PC Must have support SNMP v1, v2 and v3 Should support RMON(Optional) 	

S/N	Parameter	Minimum Specifications	Compliance (Yes/No)
		• Should have accessibility using SSH, Console access, easier software upgrade through network	
		using TFTP etc. Configuration management through CLI, GUI based software utility interface	
13.	General	Should support proposed SDN solution	
14.	Operating Temperature	Minimum 5 to 40 degree Celsius	
15.	Power Supply	Should have redundant power supply	
16.	Warranty	• 5 Years of Comprehensive Warranty from OEM	
17.	Specify Make o	Specify Make of proposed L2 Network switch	
18.	Specify Model of proposed L2 Network switch		

22. 48 Port Managed L2 switch for OOB connectivity

S/N	Specification	Compliance (Y / N)
1.	Layer 2 Switch with 48 port 10/100/1000BaseT ports and 4*10G Optical Tx Uplink port(Duplex: Full, Half)	
2.	Should have minimum switching capacity of 48 Gbps. All ports on the switch should work on line rate.	
3.	Should be IPv4 and IPv6 ready from day one	
4.	Should support minimum 4000 MAC address entries	
5.	Should support protocols like MSTP, STP, RSTP, dot1q VLAN-tagging, LACP, NTP/SNTP, RFC 5171 or equivalent standards, sflow/netflow/jflow	
6.	Should have features like port-security, auto-negotiate, flow control, MAC filtering	
7.	Should have a dedicated OOB Management port using CLI(SSH), WebUI (SSL), SNMP (V1, V2/V2c, V3), TFTP, etc.	
8.	The device should support the aggregation of the interfaces to form one single logical interface for data transfer.	
9.	Switch should support AAA features using TACACS+, Radius, LDAP, etc.	
10	All necessary SFP's, interfaces, connectors, patch cords (if any) & licenses must be delivered along with the switch from day one.	
11.	The device should support the aggregation of the interfaces to form one single logical interface for data transfer.	
12.	Should have redundant power supply	

S/N	Specification	Compliance (Y / N)
13.	The Switch should be Rack mountable	
14	5 Years of Comprehensive Warranty from OEM	
15.	Specify Make of proposed network switch	
16.	Specify Model of proposed network switch	

23. Unified Threat Management (UTM)

	Minimum Requirements	Compliance (Y / N)
	Proposed device should also perform activities like Firewall,	
1 1 1	Intrusion prevention, IP Reputation, Content Filtering, Web	
	Filtering, from day one with required Licenses and 24*7 support	
	for 5 years.	
)	Device should have Minimum firewall throughput of 80 Gbps and	
]	minimum 20Gbps (IPS + Firewall throughput)	
	The device should support at least 4x10 Gigabit ports (4x10G) from	
•	day one and should be scalable to additional 4x10 Gigabit ports	
	Should support at least 20 million concurrent sessions	
h h	Firewall should support at least 2,50,000 new connections per	
	second	
	The device should have at least one dedicated management	
	interfaces to manage the firewall. Data ports should not be used for	
	management purpose.	
'/	The device should be manageable using standard protocols like	
-	HTTP, SSL, SSH, SNMP etc.	
	The device should be able to send the event logs, alarms, etc. to the	
1	third-party tool	
_	Device should support IPv4 & IPv6 dual stack functionality	
	Firewall should support static NAT, PAT, dynamic NAT, PAT	
11	Firewall should support Nat66 (IPv6-to-IPv6) and Nat46 (IPv4-to-	
-	IPv6) functionality	
12	Firewall should support static, dynamic and multicast routing	
]	protocol	
13	The device should support redundant power supplies	

S/N	Minimum Requirements	Compliance (Y / N)
14	Should support stateful failover of sessions in Active/Standby & Active/Active or clustering mode.	
15	Firewall should support creating access polices on the basis of IPv4, IPv6 objects, protocols, ports, etc.	
16	Firewall should support user/admin authentication	
17	Solution should support troubleshooting tools like Ping, Traceroute, Packet Tracer/capture, etc.	
18	The device should be supplied with Indian Standard power cables.	
19	Web Filtering : Keyword, Block Java applets, cookies, ActiveX, Block malware, phishing, pharming URL.	
20	Intrusion Prevention System (IPS): should be able to mitigate attacks like FTP Attack, HTTP Attack, DNS Attack, ICMP Attack, TCP/IP Attack, TelNet Attack. Signatures, IPS Policies, Automatic real-time updates, Protocol Anomaly Detection.	
21	Should support proposed SDDC and SDN solution	
22	Proposed device must be NDPP/ ICSA certified at the time of bidding	_
23	5 Years of Comprehensive Warranty from OEM	
24.	Specify Make of proposed UTM	
25.	Specify Model of proposed UTM	

24. CAT 6 cable

S/N	Parameter	Minimum Specification	Compliance (Y / N)
1.	Cable type	CAT 6 cable	
2.	Data transfer speed	Minimum 1 Gbps	
3.	Material type	100% copper, twisted shielded cable	
4.	Conductor	Solid Bare Grade Copper, < 9.38OHMS/100< @ 20 degree C	
5.	Conductor diameter	23 AWG, UTP, outdoor double jacket, Anti Termite, Flame retardant Cable, ETA/TIA 568-C, IEC/ISO 11801	
6.	Temperature range	-10°C to 70°C	

25. PVC conduit

S/N	Parameter	Minimum Specification	Compliance (Y / N)
1.	Construction	ISI marked heavy duty PVC conduit with bends, joints, clamps, and otheraccessories	
2.	Size	As per the site requirement	

26. 6U wall mount rack for Wi-Fi locations

Sr. No.	Parameter	Minimum Specification	Compliance (Y / N)
1.	Rack	6U ISO certified Wall mount Powder coated cabinet	
		Lock & key with Toughened glass door at front side	
2.	Accessories	 1 Cooling Fan (AC 230V) 1 Cable Manager 1 Equipment Placement tray Socket Power Strip Accessories like Nut & Bolt Set for Whole rack to mount desired Equipment. Compatible with International Standards & ETSI Standards 	
Specify Make of proposed 6U rack			
Specify Mo	odel of proposed 6U rack		

27. Virtual Wireless Controller

S/N	Minimum Specifications	Compliance (Yes/No)
1.	Virtual controller	
2.	Virtual Wireless Controller can run on any x86 server that supports HyperV, VMware ESXi 4.x, 5.x, and 6.x and KVM Linux based systems etc.	
3.	Virtual controller quoted by bidder shall be capable of supporting all Wi-Fi APs installed under this contract from day one as well as future expansion as per quantity variation clause.	
4.	Should support supplied access point and Access Points of any make built on standard i.e. 802.11n/ac or newer	
5.	Should support Industry-standard protocols such as SNMP/SSH /SOAP/TCP and HTTP/S to access devices	
6.	Should be able to auto discover Access Points of any make which are made as per 802.11n/ac or newer standards. Should be able auto assign IP to the end devices	
7.	Automatic wireless channel selection.	
8.	Should have an ability to dynamically adjust channel and power settings based on the RF environment.	
9.	should support IPv4/ IPv6 access control lists	
10.	Should adhere and support to the security standards: WEP, WPA, WPA2, etc.	
11.	Controller should provide profiling based on protocols like HTTP, DHCP and more to identify the end devices on the network	
12.	Should be able to set user bandwidth usage restriction on basis of time duration such as Daily, Monthly, Weekly, Hourly etc.	
13.	Should be able to assign IP's to the Access Points and the end user Devices	
14.	The solution should have an integrated or external firewall capability, content filtering, blocking of malicious attacks, etc. to provide security to the overall network infrastructure	
15.	Controller should have capability to manage traffic across the network to analyze information about applications usage, peak network usage times for all access points	
16.	In case Virtual controller need a platform upgrade, the Access Point infrastructure previously working with the controller should still work as normal with the same Access Points	
17.	Virtual controller should also provide OTP based authentication, Authorization, Accounting (Radius: AAA) mechanism, web base and voucher based authentication along with an integrated payment gateway for making payments through Card based/ Internet banking /Wallet medium. The capacity of the above has to be planned as per the total quantity of the AP deployment	

S/N	Minimum Specifications	Compliance (Yes/No)
19.	Should keep the logs of Wi-Fi Services used by the end users such as IP details, time stamp/time details, End User Authentication, Mobile No. etc. as per the regulatory requirement under laws/rules/Guidelines issued by Department of Telecom, Government of India or TRAI or any other competent authority as when notified by the Govt. of India	
20.	The solution must have an integrated dashboard to view the health of the Access Points/Status of Network.	
21.		
	5 Years comprehensive warranty from OEM	
Specify		
Specify		

28. Wireless Indoor Access point

No.	Minimum Specifications	Bidder Compliance (Yes/No)
1.	Access Points proposed must include radios for both 2.4 GHz and 5 GHz with 802.11n/ac or newer. The same Access Point must also include 1 no of 10/100/1000 Base-T auto sensing RJ45 based Ethernet ports	
2.	Should support Signal rejection for 3G/LTE/WiMAX in a co- Located environment.	
3.	It should be compatible and able to integrate with the Virtual wireless Controller. Must support SSH & SNMP protocol	
4.	Should support Proactive Key Caching or other methods for Fast and Secure Roaming.	
5.	Must support feature to set the maximum no. of clients allowed to connect to AP using a particular wireless band of operation.	
6.	Each AP Should support 4 WLANs for SSID deployment flexibility.	
7.	AP's Should support Minimum 70 Meters radial coverage & Minimum 100 concurrent users @ each radio channel	
8.	AP's Should support "802.3 af" standards i.e. of Power over Ethernet	
9.	Should support interference detection and avoidance for both Wi-Fi and non-Wi-Fi interferes	
10.	The AP must be configurable as a DHCP server allocating IP addresses to the clients with a configurable lease time for the assigned IP address.	

No.	Minimum Specifications	Bidder Compliance (Yes/No)
11.	The AP must provide a complete list of all the clients connected along with their MAC address, connected SSID, connected wireless band, Authentication used and their received Signal strength value.	(169/110)
12.	support for SSID Broadcast Enable/Disable option to prevent detection of the AP network	
13.	WPA/WPA-2 Personal with TKIP/AES, WPA/WPA-2 Enterprise, WPA3 Personal Wireless Security Authentication	
14.	Support for LDAP,POP3 and internal/ external RADIUS server for authentication	
15.	MAC address access control (Filtering)	
16.	Telnet, Secure Telnet (SSH), HTTP ,and Secure HTTP (HTTPS) based management.	
17.	SNMP V1, V2, V3 must be supported.	
18.	Reset to Factory default option using Web GUI	
19.	Backup and restore of AP configuration using Web based GUI	
20.	Support for Network Time Protocol(NTP) for clock synchronization	
21.	Firmware Upgrade using HTTP & bulk upgrade support via controller	
22	Access point shall support Pole, Wall, and roof mounting options.	
23.	The Access point shall be IP65 or above rated for dust and water Ingress protection.	
24.	The Access point shall be rated for operation over an ambient temperature range of 0° to 55°C	
25.	5 Years comprehensive warranty from OEM	
Specify	the proposed Make	
Specify	the proposed Model	

29. Online UPS for ICCC

#	Parameter	Minimum Specifications	Compliance (Yes/No)
1.	Capacity	Adequate capacity to cover all IT Components at Command Control Centre at Full Load (Back Up of Minimum 60 minutes in full load)	
2.	Output Wave Form	Pure Sine wave	
3.	Input Power Factor at Full Load	>0.90	
4.	Input	Three Phase 4 Wire	
5.	Input Voltage Range	440v +/- 10 to 15% VAC at Full Load	
6.	Input Frequency	50Hz +/- 3 Hz	
7.	Output Voltage	440V +/- 10 to 15% VAC, Three Phase	
8.	Output	50Hz+/- 0.5%	
	Frequency		
9.	Inverter efficiency	>90%	
10.	Overall AC- AC Efficiency	>85%	
11.	UPS shutdown	UPS should shutdown with an alarm and indication on following conditions 1) Output over voltage 2) Output under voltage 3) Battery low 4) Inverter overload 5) Over temperature 6) Output short 7) Any other malfunction.	
12.	Battery Backup	Minimum 60 minutes in full load	
13.	_	SMF (Sealed Maintenance Free) Battery/Lithium Ion Battery	
14.	Indicators & Metering	Indicators for AC Mains, Load on Battery, Fault, Load Level, Battery Low Warning, Inverter On, UPS on Bypass, Overload, etc. Metering for Input Voltage, Output Voltage and frequency, battery voltage, output current etc.	
15.	Audio Alarm	Battery low, Mains Failure, Over temperature, Inverter overload, Fault etc.	
16.	Cabinet	Rack / Tower type	

#	Parameter	Minimum Specifications	Compliance (Yes/No)
17.	Operating	o to 50 degrees centigrade	
	Temp		
18.	Management	SNMP Support through TCP/IP & SNMP card to be	
	Protocol	provided along with UPS	
19.	warranty	5 Years comprehensive warranty from OEM	
20	Specify the proposed Make		
21.	Specify the p	roposed Model	

30. Internet Router at ICCC

#	Minimum Specifications	Compliance (Yes/No)
1.	Router should support capacity of minimum 50 Gbps.	
2.	Router should support Redundant Power Supply and should also support On line insertion and removal of the same from day one	
3.	Router should have IPV4 and IPV6, IGMP V2/V3, MLD, IGMP and PIM, 6PE and 6VPE mode for IPV6 transport over IPV4, IPv4 Multicast, VPN V4 multicast ECMP, LDP, BGP Prefix independent control (EDGE and Core) for IPV4 and IPV6, BGP, IS-IS, OSPF v2 and v3	
4.	Router should have high availability for all BFD, BGP, OSPF and IS-IS and no packet loss during controller switch over	
5	Router shall support HQOS/QoS on all kind of interface in both ingress and egress direction. Similar QOS shall be supported for all type of interface including Bundled interfaces	
6	The Router Support Ingress classification, marking and policing on physical Interfaces and logical Interfaces using source/destination IP subnet, protocol types (IP/TCP/UDP), source/destination ports, IP Precedence, MPLS EXP, DSCP, 802.1p.	
7	The router should be supplied with the following: - 3x10G Interfaces loaded with scalability to provide upto 2x10G ports in future	
8	The Router should be NDPP or EAL3 certified at the time of Bidding	
9	The Router should be Rack mountable.	
10	The Router should be supplied with Indian Standard power cables	
11	The Router should be supplied with all applicable Licenses from day one.	
12	All necessary SFP's, interfaces, connectors, patch cords (if any) must be delivered along with the router from day one	

#	Minimum Specifications	Compliance (Yes/No)
13	5 Years comprehensive warranty from OEM	
14	Specify the proposed Make	
15	Specify the proposed Model	

31. Precision Air-Condition(PAC) for ICCC (Data Centre Server farm area)

#	Minimum Specifications	Compliance (Yes/No)
1.	Capacity: 10Tr	
2.	Temperature Requirements: 20 +- 2 Degree Centigrade	
3.	Relative Humidity (RH) requirements: Ambient RH levels shall need to	
	be maintained at 50% +- 5 non-condensing.	
4.	Temperature & Relative Humidity Recorders: Records of events for about	
	past 7 days shall be recorded and presentable whenever required by	
	SCADL	
5	5 Years comprehensive warranty from OEM	
6	Specify the proposed Make	
7	Specify the proposed Model	

21.2 Annexure II -List of Locations

The SCADL/AMC may provide the list of junctions and Wi-Fi locations to the successful bidder at the time of issuing the Letter of Intent (LOI) or work order.