Gandhinagar Smart City Development Limited (GSCDL)

Request for Proposal for

Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

Bid Reference No: GSCDL – ICCC – ICT – 01 – 2025-26

Date: 27th Jun 2025

GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Registered Address: Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016
Phone No. 079 232 84150, Fax: 232 21419,
Email : gscdlspv@gmail.com
CIN: U93000GJ2017PLC099371

1. Disclaimer

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

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

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

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GSCDL 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. GSCDL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

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

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

2. Glossary/Acronyms

Terms	Meaning
ANPR	Automatic number-plate recognition
ATCS	Adaptive Traffic Controlling System
CAPEX	Capital Expenditure
CCTV	Closed-circuit television
CEO	Chief Executive Officer
CERT-IN	Computer Emergency Response Team - India
CKC	Cisco Kinetic for Cities (existing ICCC dashboard)
CV	Curriculum vitae
CPE	Customer-premises equipment
DBA	Data Base Administrator
DCF	Discounted Cash Flow
EMD	Earnest Money Deposit
ERP	Enterprise Resource Planning
FY	Financial Year
GIS	Geographic information system
GMC	Gandhinagar Municipal Corporation
GSCDL	Gandhinagar Smart City Development Limited
GST	Goods and Services Tax
ICCC	Integrated Command and Control Center
INR	Indian National Rupees
IT	Information Technology
LOA	Letter of Award
LOI	Letter of Intent
MSME	Micro, Small and Medium Enterprises
NDA	Non-Disclosure Agreement
OEM	Original Equipment Manufacturer
OPEX	Operational Expenditure
OGC	Open Geospatial Consortium
PBG	Performance Bank Guarantee
PBS	Public Bike Sharing
PO	Purchase Order
PSU	Public Sector Undertakings
RFP	Request for Proposal
RLVD	Red Light Violation Detection
SCP	Smart City Proposal
SI	System Integrator
SPV	Special Purpose Vehicle
SVD	Speed Violation Detection
SWM	Solid Waste Management
TES	Traffic Enforcement Solution
TP	Town Planning
ULB	Urban Local Bodies
VMD	Variable Message Display

E-Tender Notice

E-Tender Notice

Year 2025-26

Gandhinagar Smart City Development Limited

Gandhinagar Municipal Corporation

Pandit Deendayal Bhavan, Behind Fire Station, Sector-17, Gandhinagar, (Gujarat)
Phone No. 079 232 84150, Fax: 232 21419, Email : gscdlspv@gmail.com

Gandhinagar Smart City Development Limited is inviting tenders for work given below. Bids are invited on e-tendering rates from reputable agencies

Tender No	Name of Work	Tender Fee	E.M.D
GSCDL – ICCC – ICT – 01 – 2025-26	Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited	Rs. 15,000 /-	Rs. 46,50,000 /-

The tender can be downloaded from e-procurement portal (https://tender.nprocure.com) from Date 27th Jun 2025 from 12:00 hrs to Date 17th Jul 2025 upto 18:00 hrs. Pre Bid queries to be submitted on or before Date 3rd Jul 2025 upto 18:00 hrs and pre bid meeting will be held on Date 4th Jul 2025 at 15:00 hrs.

Any document for necessary support of tender bid must be scanned in electronic format and submitted online on https://tender.nprocure.com till 17th Jul 2025 upto 18:00 hrs. Technical Bid, Tender Fee and EMD shall be submitted in hard copy in the name of C.E.O Gandhinagar Smart City Development Limited upto Date: 21st Jul 2025 by registered post/speed post/physical hand delivery till 18:00 hours. Only such offers will be opened. Online Technical Bid opening will be on Date: 23rd Jul 2025 at 12:00 hrs

Place: Gandhinagar

SD/-
General Manager (Tech)
Gandhinagar Smart City Development Limited

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3. Fact Sheet with important dates

S. No.	Activity/information	Deadline/Details
	Name of RFP	Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited
1	Release of RFP	27th Jun 2025 from 12:00 hrs
2	Last date of receipt of queries on RFP as per format in the RFP (Annexure-1)	3rd Jul 2025 upto 18:00
3	Place, date and time for Pre bid conference	Pre-Bid conference will held on 4th July 2025 from 15:00 hrs Venue for Pre-Bid conference: Integrated Command and Control Center, 3rd Floor, Fire Station Building, Sector 17, CH-Road, Gandhinagar
4	Last date and time for submission of technical and commercial bid (Online)	17th Jul 2025 upto 18:00 hrs
5	Last date, time and address for submission of EMD and Bid fee and technical bid to GSCDL in Physical format	21st Jul 2025 upto 18:00 hrs. Late submissions will not be entertained under any circumstances.
6	Date of opening of Technical bids	23rd Jul 2025 at 12:00 hours
7	Date of Technical Presentation by bidders	To be notified later
8	Date of opening of Commercial bids	To be notified later
9	Non-refundable Tender Processing Fee/Bid Fee	**Rs. 15,000/- by Demand Draft or Banker's Cheque in the name of C.E.O Gandhinagar Smart City Development Ltd. payable at Gandhinagar.** Without the payment of tender fee the bids will be taken as incomplete and non-responsive and shall not be considered.
10	Earnest Money Deposit	**EMD of Rs 46,50,000/-, in favor of "C.E.O Gandhinagar Smart City Development ltd" in the form of Demand Draft/Bank Guarantee of any Nationalized/Scheduled.** Must be valid for at least 60 days beyond the original validity period for the bid. No exemption for submitting the EMD will be given to any agency. Bid security in any other form will not be entertained. Without the EMD the bids will be taken as incomplete and non-responsive and shall not be considered.

S. No.	Activity/information	Deadline/Details
		To The Chief Executive Officer, Gandhinagar Smart City Development ltd, Pandit Deendayal Bhavan, Behind Fire Station, Sector-17, Gandhinagar, Gujarat by RPAD, Speed Post or physical delivery Only
11	Contact Persons for queries	DGM IT, Gandhinagar Smart City Development Limited Email: gscdlspv@gmail.com Phone: 9924493921
12	Addressee and Address at which proposal in response to RFP notice is to be submitted:	Chief Executive Officer, Gandhinagar Smart City Development Limited, Gandhinagar Municipal Corporation, Pandit Deendayal Bhavan, Behind Fire Station, Sector-17, Gandhinagar, Gujarat
13	Bid validity	180 days
14	Consortium	Not allowed
15	Contract duration	24 months
14	Method of Selection	QCBS (70% weightage for Technical and 30% weightage for Financial)

4. Introduction

Smart City Mission was launched by Government of India on 25 June 2015. Gandhinagar city was selected among 100 cities to be developed as smart city in India due to various achievements, initiatives and all-inclusive approach. Accordingly, Gandhinagar city had submitted "Smart City Proposal" (SCP) for Gandhinagar City to Ministry of Urban Development, Government of India with required consent of Government of Gujarat and statutory authority of Gandhinagar Municipal Corporation.

The city of Gandhinagar was selected to be developed into a smart city under the fast-track mode of first phase of the Smart Cities Mission. The Smart City Proposal of Gandhinagar includes the smart city solutions which involve the use of technology, information and data to improve infrastructure and services within the city of Gandhinagar (The Smart Solutions Projects).

The Client- Gandhinagar Smart City Development Limited (GSCDL) now intends to select an agency for comprehensive Operations and Maintenance of Smart City Components and Integrated Command & Control Center of Gandhinagar Smart City Development Limited. The scope of work will also include dismantling and reinstallation activities (as per GSCDL's requirements) at the finalised rate under this RFP for the entire contract period

4.1 About Gandhinagar Smart City Development Limited

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

4.2 Introduction to Gandhinagar Smart city Project

The smart city proposal of Gandhinagar included several Pan City and Area Based Development initiatives with a focus on both infrastructure and ICT advancements across the city and at strategic locations. The strategic focus of the city has been identified to improve mobility, improve situational awareness, enhance public safety and security, and introduce data driven decision making. Components have been deployed throughout the city and are envisaged to accrue the following benefits for the city of Gandhinagar.

- Enable real time monitoring of the various facets of management of Gandhinagar Smart City i.e. Security, Traffic and City Utilities
- Provide capability to respond in a unified manner to situations on ground (both day to day and emergency situations) by creating a common operational picture for the relevant stakeholder
- Provide and manage touch points from all concerned stakeholders during the lifecycle of various incidents
- Define and manage the Key Performance Indicators (KPIs) for various operational aspects of the City Management
- Provide capability to conduct analysis for continuous improvement of city operations

Gandhinagar Smart City Limited had undertaken deployment of following components to achieve the objectives:

- Various sensors (integrated transport management, adaptive traffic signals, surveillance cameras, traffic enforcement sensors and systems, Solid Waste Management sensors, emergency call box, PA systems, environment and weather sensors) throughout the city to improve situational awareness
- GIS project comprising of Base Map Creation, Property Tax Survey and Implementation of Enterprise GIS application
- VMD project for deployment of Variable Messaging Displays in Gandhinagar City.
- Integration platform which will facilitate exchange and aggregation of data irrespective of underlying technology platform of application
- Integrated Command and Control center for improved visualization of ambient situation in the city and facilitation of data driven decision making
- Integration with existing and future ICT systems for smooth operations, monitoring and management

4.3 RFP Format

The intent of this RFP is to invite bids from the Bidders for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited. Detailed Pre Qualification Criteria, Technical Criteria, Evaluation Criteria and Commercial Bid evaluation are mentioned under the relevant sections in this RFP. Commercial information has to be entered online only. Commercial information must in no case be provided along with technical information. Violation will lead to rejection of the bid by the authority.

4.4 Eligible Bidders

The bidder

- Should be an Indian firm
- Should be registered under the Companies Act 1956/2013 in India
- Should be in operation in India or abroad for a period of at least 7 years as on publication of bid

Pre Qualification criteria are mentioned separately in the RFP under the relevant section.

4.5 Restriction of purchase from border countries as per GOI guideline (Annexure-1)

GSCDL will adhere office memorandum published by Ministry of Finance, Department of Expenditure, Public Procurement Division as insertion of rule 144 (xi) in the general financial rules (GFRs), 2017 dated 23rd July 2020 having no. F. No. 6/18/2019-PPD. Details of policy mentioned below:

- Any bidder from a country which shares land border with India will be eligible to bid in any procurement whether goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if bidder is registered with the Competent Authority.

    - "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

    - Bidder from a country which shares a land border with India" for the purpose of this Order means:

        - An entity incorporated, established or registered in such a country; or
        - A subsidiary of an entity incorporated, established or registered in such a country; or
        - An entity substantially controlled through entities incorporated, established or registered in such a country; or
        - An entity whose beneficial owner is situated in such a country; or
        - An Indian (or other) agent of such an entity; or
        - A natural person who is a citizen of such a country; or
        - A consortium or joint venture where any member of the consortium or joint venture falls under any of the above (consortium not allowed)

    - The beneficial owner for the purpose of (ii) above will be as under:

        - In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation

            - ✓ "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
            - ✓ "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
        - In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
        - In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
        - Where no natural person is identified under three points above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
        - 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.

- An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

5. Instruction to bidders

Bidder should study and assess the Guidelines for bidders on using integrated eProcurement System Govt. of Gujarat available at www.nprocure.com

Note: These conditions will over-rule the conditions stated in the tender document(s), wherever relevant and applicable.

5.1 Vendor / Bidder Registration on the e-Procurement System:

All the Users / Bidders (Manufacturers / Contractors / Suppliers / Vendors / Distributors etc.) registered with and intending to participate in the Tenders of various Govt. Departments / Agencies / Corporations / Boards / Undertakings under Govt. of Gujarat processed using the Integrated e-Procurement System are required to get registered on the centralized portal www.nprocure.com and get approval on specific class (e.g. A, B, C, D, UGE, UDE) from Public Works Department (in case to participate in tenders restricted to vendors / bidders in a particular class).

The non-registered users / bidders who are also eligible to participate in the tenders floated using the e-Procurement system are also required to be registered online on the e- Procurement system.
Vendors are advised to complete their online enrolment / registration process on the portal well in advance to avoid last minute hassle, it is suggested to complete enrolment at least four days before the last date of bid submission date, failing which may result in non-submission of bids on time for which vendor/end user shall be solely responsible. Vendors are required to pay online registration / enrolment fee as applicable for one time and renewal fee. For more details, please get in touch with, DGMI IT, Gandhinagar Smart City Development Limited, Gandhinagar Email: gscdlspv@gmail.com

5.2 Digital Certificates

The bids submitted online must be signed digitally with a valid Class II / Class III Digital Signature Certificate to establish the identity of the bidders submitting the bids online. The bidders may obtain pair of Encryption & Signing Class II / Class III Digital Certificate issued by an approved Certifying Authority (CA) authorized by the Controller of Certifying Authorities (CCA), Government of India.

Note: It may take upto 7 to 10 working days for issuance of Class-II / Class-III Digital Certificate, Therefore the bidders are advised to obtain it at the earliest. It is compulsory to possess a valid Class-II / Class-III Digital Certificate while registering online on the above mentioned e-Procurement portal. A Digital Certificate once mapped to an account / registration cannot be remapped with any other account / registration however it may be inactivated / deactivated.

Important Note: bid under preparation / creation for a particular tender may only be submitted using the same digital certificate that is used for encryption to encrypt the bid data during the bid preparation / creation / responding stage. However bidder may prepare / create and submit a fresh bid using his/her another / reissued / renewed Digital Certificate only within the stipulated date and time as specified in the tender.

In case, during the process of a particular bid preparation / responding for a tender, the bidder loses his/her Digital Certificate because of any reason they may not be able to submit the same bid under preparation online, Hence the bidders are advised to keep their Digital Certificates secure to be used whenever required and comply with IT Act 2000 & its amendments and CVC guidelines.

The digital certificate issued to the authorized user of an individual / partnership firm / private limited company / public limited company / joint venture and used for online bidding will be considered as equivalent to a no-objection certificate / power of attorney to the user.

Unless the certificate is revoked, it will be assumed to represent adequate authority of the specific individual to bid on behalf of the organization / firm for online tenders as per Information Technology Act 2000. This authorized user will be required to obtain a valid Class-II / Class-III Digital Certificate. The Digital Signature executed through the use of Digital Certificate of this authorized user will be binding on the organization / firm. It shall be the responsibility of management / partners of the concerned organization / firm to inform the Certifying Authority, if the authorized user changes, and apply for a fresh digital certificate for the new authorized user.

5.3 Online Payments

Payment of Tender fee/Bid Fee and EMD: The tender fees/Bid Fee and EMD has to be paid in DD/ banker's Cheque/BG **as defined in this RFP** and upload the scan copy of the same in procurement site during bid submission. The original copy of the Tender fee and EMD has to be submitted to GSCDL before last date/time of bid submission, please refer the link on the procurement portal www.nprocure.com. Amount and mode of payments are mentioned in the RFP.

5.4 Set

In order to operate on the e-Procurement system for a bidder / user, the computer system / desktop / laptop of the bidder is required to have Java ver. 765 , Internet explorer 9 / 11, latest Mozila firefox with IE Tab V2 (Enhanced IE Tab) or any other latest browser. A detailed step by step document on the same is available on the home page. Also internet connectivity should be minimum one MBPS.

5.5 Publishing of Notice Inviting Tender (N.I.T)

For the tenders processed using the e-Procurement system, only a brief advertisement notice related to the tender shall be published in the newspapers and the detailed notice shall be published only on the e-Procurement system. Bidders can view the detailed notice, tender document and the activity time schedule for all the tenders processed using the e-Procurement system on the portal www.nprocure.com The bidders are strictly advised to follow the tender time for their side for tasks / activities and responsibilities to participate in the tender, as all the activities / tasks of each tender are locked before the start time & date and after the end time & date for the relevant activity of the tender as set by the concerned department official.

5.6 Downloading the tender document(s)

The tender document and supporting document(s) if any can be downloaded only online. The tender document(s) will be available for download to concerned bidders after online publishing of the tender and up to the stipulated date & time as set in the tender.

5.7 Submit online bids

Bidders have to submit their bid online on nprocure portal (https://tender.nprocure.com) after successful filling of forms within the specified date and time as set in the tender. **(Please refer section - "Submission of Bid" for more details).**

The encrypted bid data of only those bidders who have submitted their bids within the stipulated date & time will be accepted by the e-Procurement system. It is expected that the bidder completes his bid ad submit within timeline, a bidder who has not submitted his bid within the stipulated date & time will not be available during opening.

Size of Bid documents uploaded during bid preparation should be as per requirements of nprocure portal.

5.8 Submission of Earnest Money Deposit and Bid Fee

The bidders shall submit their Earnest Money Deposit (**as per annexure 2**) and bid fee either as in usual physically sealed Earnest Money Deposit/Bid Fee envelope and the same should reach the concerned office OR Online using payment gateway as stated in the Notice Inviting Tender/ Tender document. Bidders also have to upload scanned copy of Earnest Money Deposit/Bid Fee instrument along with the reference details online.

Bid Fee/Tender Fee submitted is non-refundable.

For Unsuccessful bidders: The EMD of all unsuccessful bidders would be refunded without interest by Authority on finalization of the bid in all respects with the successful bidder.

For Successful bidders: The EMD, for the amount mentioned above, of successful bidder would be returned without interest upon submission of Performance Bank Guarantee by the successful bidder.

In case bid is submitted without the EMD then Authority reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.

The EMD shall be forfeited in any of the following circumstances:

- If a Bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any;
- If the offer is modified or varied in a manner not acceptable to the Authority after opening of the proposals during the bid validity period or any extension thereof
- If the applicant is found to have conflict of interest
- If the first ranked bidder withdraws his proposal during negotiations
- 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.

5.9 Opening of Tenders

The concerned department official receiving the tenders or his duly authorized officer shall first open the online Earnest Money Deposit/Bid Fee envelope of all the bidders and verify the same uploaded by the bidders. He / She shall check for the validity of Earnest Money Deposit/Bid Fee as required. He / She shall also verify the scanned documents uploaded by the bidders, if any, as required. In case, the requirements are incomplete, the next i.e. technical and commercial envelopes of the concerned bidders received online shall not be opened.

The concerned official shall then open the other subsequent envelopes submitted online by the bidders in the presence of the bidders or their authorized representatives who choose to be present in the bid opening process or may view opened details online.

5.10 Brief Case

Bidders are privileged to have an online briefcase to keep their documents online and the same can be attached to multiple tenders while responding, this will facilitate bidders to upload their documents once in the briefcase and attach the same document to multiple bids submitting.

For any further queries / assistance, bidders may contact: DGM IT, Gandhinagar Smart City Development Limited, Gandhinagar Email: gscdlspv@gmail.com

5.11 Key Dates

The suppliers/bidders are strictly advised to follow the tender schedule (Key Dates) for their side of tasks and responsibilities to submit their bids, as the system is time and date locked.

5.12 General

- While every effort has been made to provide comprehensive and accurate background information, requirements and envisaged solution(s) specifications, Bidders must form their own conclusions about the solution(s) needed to meet the Authority's requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.

- All information supplied by Bidders as part of their bids in response to this RFP, may be treated as contractually binding on the Bidders, on successful award of the assignment by the Authority on the basis of this RFP.

- No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of Authority. Any notification of preferred bidder status by Authority shall not give rise to any enforceable rights by the Bidder. Authority may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of Authority.

5.13 Compliant Bids/Completeness of Response

Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

Failure to comply with the requirements of this paragraph may render the bid non-compliant and the Bid may be rejected. Bidders must:

- Include all documentation specified in this RFP, in the bid.
- Follow the format of this RFP while developing the bid and respond to each element in the order as set out in this RFP.
- Comply with all requirements as set out within this RFP.

5.14 Bidder to inform

The Bidder shall be deemed to have carefully examined the Terms & Conditions, Scope, Service Levels, Specifications, and Schedules of this RFP. If bidder has any doubts/clarifications as to the meaning of any portion of the Conditions or the specifications he shall, before the last date for Submission of Pre-Bid Queries, set forth the particulars thereof and submit them to Authority in writing in order that such doubt may be removed or clarifications are provided.

5.15 Bid Preparation costs

The Bidder shall bear all costs associated with the preparation and submission of its bid, for the purposes of clarification of the bid, if so desired by the Authority.

5.16 Bidder queries

Any clarification regarding the RFP document and any other item related to this project can be submitted to Authority as per the submission mode and timelines mentioned in the Fact Sheet. The pre-bid queries should be submitted in excel sheet format, along with name and details of the organisation submitting the queries. Authority shall not be responsible for ensuring that the bidders' queries have been received by them. Any requests for clarifications post the indicated date and time shall not be entertained by Authority. **Bidders must submit their queries as per the format mentioned in Annexure 3**

5.17 Responses to Pre-Bid Queries and Issue of Corrigendum

Authority will organize a pre-bid conference and will respond to any request for clarification or modification of the bidding documents. Authority shall formally respond to the pre-bid queries after the pre-bid conference. No further clarifications shall be entertained after the date and time of submission of queries.

Authority shall endeavor to provide timely response to all queries. However, Authority makes no representation or warranty as to the completeness or accuracy of any response made in good faith.

Authority does not undertake to answer all the queries that have been posed by the bidders.

Any modifications of the RFP Documents, which may become necessary as a result of the Pre-Bid Conference, shall be made by Authority exclusively through a corrigendum. Any such corrigendum shall be deemed to be incorporated into this RFP. However, in case of any such amendment, the bid submission date may be extended at the discretion of Authority

Any corrigendum/notification issued by Authority, subsequent to issue of RFP, shall only be available/hosted on the website URL mentioned in the fact sheet. Any such corrigendum shall be deemed to be incorporated into this RFP.

5.18 Submission of Bid

Submission of the Tender is online and must be through e-Procurement site https://tender.nprocure.com. The Tender Inviting Authority will not be held responsible for any sort of delay or the difficulties faced during the submission of the Tenderer.

The hard copies of Tender Fee/Bid Fee, EMD and Technical Bid along with supporting documents must reach the authority as per timelines mentioned in the RFP. No reasons related to delay will be entertained by authority. Tender Fee/Bid Fee, EMD and Technical Bid along with supporting documents must be received in sealed envelopes as follows

Sealed Envelope 1: Original EMD and Original Tender Fee. The envelope must mention tender Fee and EMD, RFP Name, RFP number along with the bidder's name, address, phone number and email id.

Sealed Envelope 2: Technical Bid along with all necessary annexure, supporting documents as indicated in the RFP, **duly signed and stamped on each page** by authorized personnel of bidder (Power of Attorney to be attached). The envelope must mention Technical Bid, RFP Number , Name along with the bidder's name, address, phone number and email id.

Sealed Envelope 3 : Contains Sealed Envelope 1 and 2 With the title of "Selection of Agency for Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited" along with RFP Number, RFP Name, Bidder's name, address, phone number and email id. The bidder must ensure that envelopes containing hard copies as above must be properly sealed. Authority will not be responsible for any damage caused to the hard copies submitted.

Financial bid needs to be uploaded on the portal as per the formats. The scanned copy should also be uploaded on the portal. The scanned sheet total should be same as the line items filled on the portal. In

case of variation, the online portal data shall be taken into evaluation and scanned image will be rejected. However scanned document can have more line items under the major line items in case the bidder wants to provide the breakup. In no case, manually submitted financial bid document shall be entertained/ accepted.

5.19 Language

The bid should be prepared and submitted by the bidders in English language only. If any submitted supporting documents are in any language other than English, translation of the same in English language is to be provided (duly attested) by the Bidders. For purposes of interpretation of the documents, the English translation shall govern. Such translated documents shall be notarized and incase of any incorrectness of the translation, the bidder will be penalized.

5.20 Authentication of Bids

An authorized representative (or representatives) of the Bidder shall initial all pages of the Pre-Qualification, Technical and Commercial Bids. Bid should be accompanied by an authorization in the name of the signatory (or signatories) of the Bid. The authorization shall be in the form of a written **power of attorney (annexure 4)** accompanying the Bid or in any other form demonstrating that the representative has been duly authorized to sign.

5.21 Amendment of Request for Proposal

At any time prior to the due date for submission of bid, Authority may, for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder(s), modify the RFP document by amendments. Such amendments shall be uploaded on the www.smartcityGandhinagar.org, through corrigendum and shall form an integral part of RFP document. The relevant clauses of the RFP document shall be treated as amended accordingly.

It shall be the responsibility of the prospective bidder(s) to check the Authority's website from time to time for any amendment in the RFP document. In case of failure to get the amendments, if any, Authority shall not be responsible.

In order to allow prospective bidders a reasonable time to take the amendment into account in preparing their bids, Authority, at its discretion, may extend the deadline for submission of bids. Such extensions shall be uploaded on website of the Authority.

5.22 Bid Price

Commercial Bid shall be as per the format provided in **Annexure 5**. Bidders shall give the required details of all applicable taxes, duties, other levies and charges etc. in respect of direct transaction between Authority and the Bidder.

Bidders shall quote for the entire scope of contract on a "overall responsibility" basis such that the total bid price covers Bidder's all obligations mentioned in or to be reasonably inferred from the bidding documents in respect of providing the product/services.

Prices quoted by the Bidder shall remain firm during the entire contract period and not subject to variation on any account. A bid submitted with an adjustable price quotation shall be treated as non-responsive and rejected.

5.23 Deviations and Exclusions

Bids shall be submitted strictly in accordance with the requirements and terms & conditions of the RFP. The Bidder shall submit a No Deviation Certificate as per the format mentioned in Annexure 6. The bids with deviation(s) are liable for rejection.

5.24 Total Responsibility

Bidder should issue a statement undertaking total responsibility for the defect free operation of the proposed solution as per the format mentioned in Annexure 7.

5.25 Late Bids

Late submission will not be entertained and will not be permitted by the authority. The bids submitted by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter. Authority reserves the right to modify and amend any of the above-stipulated condition/criterion.

5.26 Right to Terminate the Process

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

This RFP does not constitute an offer by Authority.

5.27 Non-Conforming bids

A bid may be construed as a non-conforming bids and ineligible for consideration:

- If it does not comply with the requirements of this RFP.
- If a bid does not follow the format requested in this RFP or does not appear to address the particular requirements of the solution.

5.28 Acceptance/Rejection of Bids

- Authority reserves the right to reject in full or part, any or all bids without assigning any reason thereof. Authority reserves the right to assess the Bidder's capabilities and capacity. The decision of Authority shall be final and binding.
- Bid should be free of over writing. All correction or addition must be clearly written both in words and figures.

In the event of any assumptions, presumptions, key points of discussion, recommendation or any points of similar nature submitted along with the Bid, Authority reserves the right to reject the Bid and forfeit the EMD.

If there is any discrepancy in the commercial bid, it will be dealt as per the following:

- If, in the price structure quoted for the required goods/services/works, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
- If there is a discrepancy between words and figures, the amount in words shall prevail.
- If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of Authority, the bid is liable to be disqualified.

5.29 Confidentiality

All the material/information shared with the Bidder during the course of this procurement process as well as the subsequent resulting engagement following this process with the successful bidder, shall be treated as confidential and should not be disclosed in any manner to any unauthorized person under any circumstances. The successful bidder has to furnish a Non-Disclosure Agreement (NDA) **as per Annexure 8.**

5.30 Disqualification

The bid is liable to be disqualified in the following cases or in case bidder fails to meet the bidding requirements as indicated in this RFP:

- During validity of the bid, or its extended period, if any, the bidder changes its quoted prices.
- The bidder's bid is conditional and has deviations from the terms and conditions of RFP.
- Bid is received in incomplete form.
- Bid is not accompanied by all the requisite documents.
- Information submitted in technical bid is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any.
- Financial bid is enclosed with the same document as technical bid.
- Bidder tries to influence the bid evaluation process by unlawful/corrupt/fraudulent means at any point of time during the bid process.
- In case any one party submits multiple bids or if common interests are found in two or more bidders, the bidders are likely to be disqualified, unless additional bids/bidders are withdrawn upon notice immediately
- If any of the Lead Bidder is also partner in any other bid, then all the affected bids shall be disqualified.
- Bids without EMD and Tender fee will be disqualified

5.31 Fraud and Corrupt Practices

- The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, Authority shall reject a Bid without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, Authority shall, without prejudice to its any other rights or remedies, forfeit and appropriate the EMD or PBG, as the case may be, as mutually agreed genuine pre- estimated compensation and damages payable to Authority for, inter alia, time, cost and effort of Authority, in regard to the RFP, including consideration and evaluation of such Bidder's Bid.

- Without prejudice to the rights of Authority under Clause above and the rights and remedies which Authority may have under the LOI or the Agreement, if a Bidder is found by Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOI or the execution of the Agreement, such Bidder shall not be eligible to participate in any tender or RFP issued by Authority during a period of 3 years from the date such Bidder is found by Authority to have directly or through an agent, engaged or indulged in any Prohibited Practices.

- For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:

- "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of Authority who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOI or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of Authority, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the Award or the Agreement, who at any time has been or is a legal, financial or technical consultant/adviser of Authority in relation to any matter concerning the Project;

- "fraudulent practice" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;

- "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person's participation or action in the Selection Process;

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

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

5.32 Conflict of Interest

- A bidder shall not have a conflict of interest that may affect the Selection Process or the Solution delivery (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, Authority shall forfeit and appropriate the EMD, if available, as mutually agreed genuine pre-estimated compensation and damages payable to Authority for, inter alia, the time, cost and effort of Authority including consideration of such Bidder's Bid, without prejudice to any other right or remedy that may be available to Authority hereunder or otherwise.

- Authority requires that the bidder provides solutions which at all times hold Authority's interest's paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The bidder shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of Authority.

5.33 Sub-Contracting

- The bidder would not be allowed to sub-contract work, except for the following: Cabling and fixtures work, and all civil work and electrical work during implementation. Facility Management Staff at Command & Communications Center.

- The Bidder/Consortium Partners may sub-contract/outsource the OEM services like system configurations, commissioning, product servicing and upgradation support during O&M period from OEMs only.

- Sub-contracting 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. The lead bidder shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the sub-contracting agreements (if any) between both the parties would be required to be submitted to Authority.

5.34 Right to vary quantity

- At the time of award of contract or during the contract period, the quantity of goods, works or services originally specified in the bidding documents may be increased. It shall be without any change in the unit prices or other terms and conditions of the Bid and the bidding documents.

- If the Authority does not procure any subject matter of procurement or procures less than the quantity specified in the bidding documents due to change in circumstances, the bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding document.

- Repeat orders for extra items or additional quantities may be placed, if it is provided in the bidding document, on the rates and conditions given in the contract if the original order was given after inviting open competitive bids. Delivery or completion period may also be proportionally increased.

5.35 Site Visit

- The Bidder may wish to visit and examine the site or sites and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract. The costs of visiting the site or sites shall be at the Bidder's own expense.

- The Authority will arrange for the Bidder and any of its personnel or agents to gain access to the relevant site or sites, provided that the Bidder gives the Authority adequate notice of a proposed visit of at five (5) days. Failure of a Bidder to make a site visit will not be a cause for its disqualification.

- No site visits shall be arranged or scheduled after the deadline for the submission of the Bids and prior to the award of Contract.

5.36 Key Personnel

Authority has identified certain key positions and minimum qualifications for each of the positions that should be part of project team of the bidder (hereby referred to as "key personnel"). Details of these key positions are provided in Key Personnel Criteria

Initial Composition; Full Time Obligation; Continuity of Personnel

Bidder shall ensure that each member of the Key Personnel devotes substantial working time as per the staffing schedule/ manpower plan to perform the services to which that person has been assigned as per the bid.

Bidder shall not make any changes to the composition of the Key Personnel and not require or request any member of the Key Personnel to cease or reduce his or her involvement in the provision of the Services during the defined term of the engagement unless that person resigns, is terminated for cause, is long-term disabled, is on permitted mandatory leave under Applicable Law or retires.

In any such case, the Authority's prior written consent would be mandatory.

5.37 Evaluations

Bidder shall carry out an evaluation of the performance of each member of the Key Personnel in connection with the Services at least once in each Contract Year. Bidder shall provide reasonable written notice to Authority of the date of each evaluation of each member of the Key Personnel. Authority shall be entitled to provide inputs to the bidder for each such evaluation. Bidder shall promptly provide the results of each evaluation to Authority, subject to Applicable Law.

5.38 Replacement

In case any proposed resource resigns, then the Bidder has to inform Authority within one week of such resignation.

Bidder shall promptly initiate a search for a replacement to ensure that the role of any member of the Key Personnel is not vacant at any point in time during the contract period, subject to reasonable extensions requested by Bidder to Authority.

Before assigning any replacement member of the Key Personnel to the provision of the Services, Bidder shall provide Authority with:

- A resume, curriculum vitae and any other information about the candidate that is reasonably requested by Authority; and
- An opportunity to interview the candidate.

The bidder has to provide replacement resource of equal or better qualification and experience as per the requirements of this RFP.

If Authority objects to the appointment, Bidder shall not assign the individual to that position and shall seek an alternative candidate in accordance with the resource requirements of this RFP.

The bidder needs to ensure sufficient time of overlap period in such replacements to ensure sufficient knowledge transfer for satisfactory performance under the contract. Authority will not be responsible for any knowledge transition to the replacement resource and any impact/escalation of cost incurred by the bidder due to resource replacement.

5.39 High Attrition

If in the first 6 months period from the Contract Effective Date and in any rolling 12 months period during the Term of contract, 15 percent or more of the members of the Key Personnel cease or reduce their involvement in the Services for any reason other than with Authority's prior written consent, Bidder shall:

- provides Authority with a reasonably detailed explanation as to the reasons for such change, including, where applicable and permitted, notes from any exit interviews conducted by Bidder with any departing member of the Key Personnel; and
- if such change to Key Personnel has or is likely to have any material adverse impact on the provision of the Services or any substantial part thereof, undertake, at its own costs, such remediation acts as are reasonably necessary in order to improve the retention of the Key Personnel including making reasonable changes to the human resources policies and procedures applicable to the Key Personnel (including those related to compensation, benefits and other

conditions so that they are competitive with the market) as may be necessary to ensure that such policies and procedures comply with Good Industry Practices.

5.40 Inclusion of MSMEs in Project Delivery

Bidders are encouraged to include Micro, Small and Medium Enterprises (MSMEs) in the delivery of the project. Bidders should earmark a minimum of 20 % of the total contract for procuring goods and services from MSMEs. Activities that can be sub-contracted to MSME/MSE partners are restricted to those defined in above section Sub-Contracting

6. Selection process of the bidder

6.1 Opening of Bids

The Bids shall be opened by Authority in presence of those Bidders or their representatives who may be present at the time of opening.

The representatives of the bidders should be advised to carry the identity card or a letter of authority from the bidder firms to identify that they are bona fide representatives of the bidder firm, for attending the opening of bid. There will be three bid-opening events

- Set 1 (Tender processing fees & EMD)
- Set 2 (Pre-qualification and Technical bid)
- Set 3 (Commercial bid)

In case the bidder has not submitted Tender Fee and EMD as per RFP terms and conditions then the bid will be rejected and no further scrutiny/evaluation of pre qualification criteria and technical evaluation will be carried out. The date and time for opening of Technical & Commercial bid would be communicated to the qualified bidders. The Technical Bids of only those bidders will be opened who clear the Pre-qualification stage. The Commercial Bids of only those bidders will be opened who score equal to or more than 70% in Technical Evaluation.

6.2 Preliminary Examination of Bids

Authority shall examine the bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be nonresponsive for any reason or not meeting any criteria specified in the RFP, shall be rejected by Authority and shall not be included for further consideration.

Initial Bid scrutiny shall be held, and bids will be treated as non-responsive, if bids are:

- Not submitted in format as specified in the RFP document
- Received without the Letter of Authorization (Power of Attorney)
- With incomplete information, subjective, conditional offers and partial offers submitted
- Submitted without the documents requested
- Non-compliant to any of the clauses mentioned in the RFP
- With lesser validity period

6.3 Found with suppression of details Clarification of Bids

During the bid evaluation, Authority may, at its discretion, ask the Bidder for any clarification(s) 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.

6.4 Evaluation of Bids

Authority 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.

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.

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. The steps for evaluation are as follows:

6.4.1 Stage-1 Pre-qualification Criteria

- Authority shall validate the Set 1 "Tender processing fee & Earnest Money Deposit (EMD)".
- If the contents of the Set 1 are as per requirements, Authority shall open the "Pre-Qualification Bid". In case, the Bidder does not meet any one of the conditions, the bidder shall be disqualified.
- Bidders would be informed of their qualification/disqualification based on the Pre- Qualification criteria through Email and 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.
- Technical bids for those bidders who don't pre-qualify will not be opened. Financial bid will not be opened for those bidders, who don't qualify the technical evaluation. Bid Security amount shall be retuned for unsuccessful bidder after PBG is submitted by successful bidder.
- Pre-Qualification checklist (Annexure 9) must be submitted along with all supporting documents with proper indexing of page numbers/section numbers
- In case multiple criteria are being satisfied under 1 or more project, then the same would be considered as long as documentary evidences related to quantities required under the criteria and cost are provided and are verifiable.

Sr No	Pre Qualification Criteria	Document Proof
1	The Sole Bidder Should be: Registered under the Companies Act 1956/2013 and subsequent amendments in India Should have history of continuous operation in India for last 10 years or more calculated from date of publication of this RFP Bidder should be a legal entity duly registered to do business in India.	Copy of Certification of Incorporation / Registration Certificate PAN Card GST Certificate Certificate for "Change in The Name", if applicable

Sr No	Pre Qualification Criteria	Document Proof
2	The Bidder must have a minimum average annual turnover of at least Rs. 30 Crore from combination of ICT Business, ICT Services / related smart technology projects and services, during the mentioned Five financial years as on 31.03.2024 i.e FY 2019-20, 2020-21, 2021-22, 2022-23, 2023-24. Bidder must have positive net-worth as on end of Financial year 2023-24	Audited and Certified Balance Sheet and Profit/Loss Account for the last Five Financial Years should be enclosed. CA Certificate be enclosed to be submitted as proof (Annexure 10)
3	Bidder must have demonstrable expertise and experience of Setting up and O&M of Integrated command and control room with minimum contract value of Rs. 5.00 cr along with its dashboard application for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years Assignment in which CCC comprising of Control Room/ Command and Control Room Software, Video wall, Operations room, contact center /helpdesk are built. The above experience must be demonstrated under 1 single project	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
4	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of Adaptive Traffic Control System and Traffic Enforcement System (RLVD/ANPR/SVD) components along with its software application and centralized monitoring for at least 20 junctions (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate

Sr No	Pre Qualification Criteria	Document Proof
5	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M along with its software application and centralized monitoring for at least 450 General Surveillance Cameras (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
6	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of planning, scheduling, monitoring of Vehicles (Fire vehicles, CIty Buses, Ambulances Waste Collection Vehicles etc.) through at least 100 GPS based devices (under 1 single project) with centralized monitoring for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
7	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M along with its software application of at least 10 Variable Messaging Display Boards (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
8	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of physical servers, physical storages (NAS / Scale-out NAS / SAN / Unified or equivalent storage solution), cloud services including Disaster Recovery services under 1 single project for Smart City/ ULB/ Government Organization /	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate

Sr No	Pre Qualification Criteria	Document Proof
	State Government Departments / Central Govt Departments in India in the last 7 years	
9	Bidder must have demonstrable expertise and experience (under 1 single project) of integration with a centralized command and control system of at least 4 out of following solutions for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years under a single project 1. Adaptive Traffic Control System 2. Traffic Enforcement System (RLVD, ANPR, SVD) 3. Smart Streetlights 4. General Surveillance Cameras 5. Intelligent Transport Management System 6. Solid Waste Management (Door to Door waste collection)	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
10	Bidder must have demonstrable expertise and experience of supply, installation, testing, commissioning and O&M of at least 1 GIS application, with a minimum contract value of Rs. 5 crores, for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
11	The sole bidder should not be blacklisted by any Central / State Government Department or Central/State Public Sector Units (PSUs) in India as on the bid submission date & **Litigation History** The sole bidder should provide accurate information on any litigation or arbitration resulting from contracts	Undertaking by the authorized signatory of bidder as per format given in Annexure Declaration on Non-Blacklisting (Annexure 11 on Rs. 300 stamp paper notarized) Litigation History format is also given in Annexure 11

Sr No	Pre Qualification Criteria	Document Proof
	completed or under execution by him over the last five years. A consistent history of awards against the Applicant or any partner of a joint venture may result in failure of the applicant.	
12	Sole Bidder/Lead bidder should establish Project office within 45 days of issuance of LoI in Ahmedabad/Gandhinagar if not established earlier	Undertaking to open Office in Ahmedabad / Gandhinagar (annexure 13) Or Copies of any two of the followings: Property Tax / Electricity / Telephone Bill /GST Registration /Lease agreement.
13	The Sole Bidder should possess any one of the below certifications which are valid at the time of bidding: ISO 9001: 2015 or above ISO 20000-1:2018 or above for IT service management ISO 27001:2013 or above for Information Security Management System Any other equivalent certification	Copies of valid certificates in the name of bidding entity.

Note: Projects where CAPEX is completed and with minimum 2 years O&M completed will only be considered. Proofs related to CAPEX completion and 2 years O&M completion must be provided for assessment. Non provision of any documents will lead to dis qualification of the bidder.

6.4.2 Stage-2 Technical Evaluation

- The technical bid must be accompanied by a Technical Bid Covering letter as per Annexure 16
- "Technical bid" will be evaluated only for the bidders who succeed in Stage 1.
- Authority will review the technical bids of the short-listed bidders to determine whether the technical bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.
- Each Technical Bid will be assigned a Technical Score out of a maximum of 100 points (85 points for Financial Capacity + Previous Project Experience + Approach & Methodology and 15 points for manpower CVs). Only the bidders who get Technical Score of more than or equal to 70% in Technical Evaluation will qualify for Commercial Evaluation stage.
- Bidders should submit detailed – Approach & Methodology and present the same with manpower deployment plan during Technical PPT with authority
- Documentary evidence i) Citation, ii) work order / contract and, iii) completion certificate issued by the client is required for all project experience.
- Important: Minimum absolute technical score to qualify for commercial evaluation is 70 marks out of total 100 marks.

Authority (or a nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder. Also, subcontracted projects will not be considered as part of the evaluation.

In case multiple criteria are being satisfied under 1 or more project, then the same would be considered as long as documentary evidence related to quantities required under the criteria and cost are provided and are verifiable.

Sr No	Technical Evaluation Criteria	Marking criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
1	The Bidder must have a minimum average annual turnover of at least Rs. 30 Crore from combination of ICT Business, ICT Services / related smart technology projects and services, during the mentioned Five financial years as on 31.03.2024 i.e FY 2019-20, 2020-21, 2021-22, 2022-23, 2023-24.	> 30 Cr to <= 65 Cr	2	8
		>65 Cr to <= 100 Cr	4	
		>100 Cr	8	
2	Bidder must have demonstrable expertise and experience of Setting up and O&M of Integrated command and control room with minimum contract value of Rs. 5.00 cr along with its dashboard application for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years Assignment in which CCC comprising of Control Room/ Command and Control Room Software, Video wall, Operations room, contact center /helpdesk are built. The above experience must be demonstrated under 1 single project	1 Project	3	9
		2 Projects	6	
		3 or more projects	9	
3	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of Adaptive Traffic Control System and Traffic Enforcement System (RLVD/ANPR/SVD) components along with its software application and centralized monitoring for at least 20 junctions (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central	1 Project	2	8
		2 Projects	4	
		3 or more projects	8	

Sr No	Technical Evaluation Criteria	Marking criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
	Govt Departments in India in the last 7 years			
4	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M along with its software application and centralized monitoring for at least 450 General Surveillance Cameras (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	1 Project	2	8
		2 Projects	4	
		3 or more projects	8	
5	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of planning, scheduling, monitoring of Vehicles (Fire vehicles, CIty Buses, Ambulances Waste Collection Vehicles etc.) through at least 100 GPS based devices (under 1 single project) with centralized monitoring for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	1 Project	2	8
		2 Projects	4	
		3 or more projects	8	
6	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of atBidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M along with its software application of at least 10 Variable Messaging Display Boards (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years least 10 Variable Messaging Display Boards along with its software application for Smart City/ ULB/ Government Organization /	1 Project	2	8
		2 Projects	4	
		3 or more projects	8	

Sr No	Technical Evaluation Criteria	Marking criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
	Government Department in India in the last 7 years			
7	Bidder must have demonstrable Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of physical servers, physical storages (NAS / Scale-out NAS / SAN / Unified or equivalent storage solution), cloud services including Disaster Recovery services under 1 single project for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years expertise and experience of design, supply, installation, testing, commissioning and O&M of at least 10 servers and 2 storage for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years	1 Project	2	8
		2 Projects	4	
		3 or more projects	8	
8	Bidder must have demonstrable expertise and experience of supply, installation, testing, commissioning and O&M of at least 1 GIS application, with a minimum contract value of Rs. 5 crores, for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years	1 Project	2	8
		2 Projects	4	
		3 or more projects	8	

Sr No	Technical Evaluation Criteria	Marking criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
9	Understanding of Scope of Work and Detailed Approach & Methodology for O&M period (To be made a part of the technical proposal and presented to the authority during technical ppt if qualified)	Following indicative points to be covered. The points are indicative and bidders are encouraged to propose more points relavant to the project 1. Under standing of scope of work, strategy to ensure project implementation within timelines 2. Bidder's comments on Hand Over Take Over Process 3. Bidder's comments on O&M, AMC service offering for IT & Non-IT components under scope of work and assurance on SLA compliance. 4. Bidder's comments on support services for software components under scope of work 5. Bidder's comments on Monitoring and Management system of ICCC assets, handling existing Enterprise Management System including, Helpdesk, other desired services etc. 6. Resource deployment plan in detail. Deployment of support/additional staff if proposed. Roles and responsibility of team member must be mentioned 7. Identification of major risks and their mitigation plan 8. Approach and Measures for Information security of the complete solution from various threats including hacking attempts, internal threats, etc. 9. Comments related to API	20	20

Sr No	Technical Evaluation Criteria	Marking criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
		creation, integration related activities that may be required in the course of the project 9. Any other points related to the project reference best practise followed at other Smart Cities 10. COmments on revenue generation with existing Components		
Financial Capacity + Previous Project Experience + Approach & Methodology Total Marks				85

Note: Projects where CAPEX is completed and with minimum 2 years O&M completed will only be considered

Sr No	Key Personnel	Criteria	Marking Criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
1	Key Personnel CVs (Project Manager – Max 5 marks)	Educational Qualification	B.E. / B. Tech (IT/ CSE/ ECE) + MBA / MCA / M.Tech (IT/Computer Science) / MBA IT – 1 mark Else ZERO	0.5	5

Sr No	Key Personnel	Criteria	Marking Criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
		Overall Work Experience in IT Sector	> 15 years work experience in the capacity of Project Director/ Program Manager in ICT/ Command and Control Centre Implementation and O&M with Smart City / ULB / State Govt. / Central Govt. / PSUs	2	
			>12 years to <=15 years work experience in the capacity of Project Director/ Program Manager in ICT/ Command and Control Centre Implementation and O&M with Smart City / ULB / State Govt. / Central Govt. / PSUs	1	
			Else Zero	0	
		Specific Work Experience	>3 projects as Project/Program management Experience in Large ICT/ Command and Control Centre implementation Project of value > 100 crores crores with Smart City / ULB / State Govt. / Central Govt. / PSUs	2	
			2 projects as Project/Program management Experience in Large ICT/ Command and Control Centre implementation Project of value > 100 crores crores with Smart City / ULB / State Govt. / Central Govt. / PSUs	1	
			Else Zero	0	
		Certification	Submission of valid Prince 2 or PMP certificate Else Zero	0.5	
2	Network Expert	Educational Qualification	MCA / M.Tech (IT/Computer Science) / MBA IT	1	5
			B.E (IT/Computer Science) / B.Tech (IT/Computer Science)	0.5	
			Else ZERO	0	
		Overall Work Experience in IT Sector	> 10 years work experience in IT Sector projects with Smart City / ULB / State Govt. / Central Govt. / PSUs	2	

Sr No	Key Personnel	Criteria	Marking Criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
			>8 years to <=10 years work experience in IT Sector projects with Smart City / ULB / State Govt. / Central Govt. / PSUs	1	
			Else Zero	0	
		Specific Work Experience	> 5 years experience in managing all types of Networks in IT Projects with Smart City / ULB / State Govt. / Central Govt. / PSUs	2	
			> 3 years to <=5 years experience in managing all types of Networks in IT Projects with Smart City / ULB / State Govt. / Central Govt. / PSUs	1	
			Else Zero	0	
3	Infrastructure Expert (Server, Storage and cloud services)	Educational Qualification	MCA / M.Tech (IT/Computer Science)/MBA IT	1	5
			B.E (IT/Computer Science) / B.Tech (IT/Computer Science)	0.5	
			Else Zero	0	
		Overall Work Experience in IT Sector	> 10 years work experience in IT Sector projects with Smart City / ULB / State Govt. / Central Govt. / PSUs	2	
			>8 years to <=10 years work experience in IT Sector projecgts with Smart City / ULB / State Govt. / Central Govt. / PSUs	1	
			Else Zero	0	
		Specific Work Experience	> 5 years work experience in managing servers, storage, cloud services for large IT projects of similar nature with Smart City / ULB / State Govt. / Central Govt. / PSUs	2	
			> 3 to <=5 years work experience in managing servers, storage, cloud services for large IT projects of similar nature with Smart City / ULB / State Govt. / Central Govt. / PSUs	1	

Sr No	Key Personnel	Criteria	Marking Criteria	Marks obtainable on submission of relevant documents and verifiable proofs	Max Marks
			Else Zero	0	
Key Personnel Evaluation Total Marks					**15**

- Documentary evidence i) Citation, ii) work order / contract and, iii) work completion certificate issued by the client is required for all project experience.
- Important: Minimum absolute technical score to qualify for commercial evaluation is 70 marks out of total 100 marks.
- Authority (or a nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder. Also, sub contracted projects will not be considered as part of the evaluation.
- Key personnel mentioned in the table above are for marking purpose. Kindly refer the table of total manpower deployment.
- Important: Minimum absolute technical score to qualify for commercial evaluation is 70 marks out of total 100 marks.
- Experience will be considered only if the firm has participated as lead bidder.
- Authority (or a nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder. Also, sub contracted projects will not be considered as part of the evaluation

Key Personnel Criteria

- Bidder shall provide adequate number of personnel, each responsible for a specific role within the project. Bidder shall provide clear definition of the role and responsibility of each individual personnel. Bidder shall have a defined hierarchy and reporting structure for various teams that shall be part of the project. Bidder has to provide the list of proposed Resources for the Project. Any changes in Resource deployment will have to be approved by the Authority.
- However, Bidder shall independently estimate the teams size required to meet the requirements of Service Levels as specified as part of this tender. Except for Database Architect, Electrical Expert and IT Auditor Third Party all other proposed positions shall be Onsite throughout the entire project. The bidder is expected to provide periodic reports (as required by the authority) on involvement of each team member (Full time and part time).
- Any additional or support manpower shall be estimated and should be accounted for in the Commercial proposal by the selected bidder, so that, the project as per the scope defined and agreement are fulfilled and the project objectives are met.

Manpower Deployment

- Bidder shall deploy Manpower during the course of the project. The deployed resource shall report to GSCDL Project In-charge for Smart City Project and work closely with Program Management Office of the project. Following are the minimum resources required to be deployed in the Project (Price should be quoted accordingly in commercial bid format), however SELECTED BIDDER may deploy additional resources based on the need of the Project and to meet the defined SLAs in this RFP. Selected Bidder is required to ensure that sufficient manpower

with required expertise is available on the project to meet the SLAs. No relaxation in SLAs / downtime exceptions will be considered in case of manpower shortage.

- Any additional or support manpower shall be estimated and should be accounted for in the Commercial proposal by the selected bidder, so that, the project as per the scope defined and agreement are fulfilled and the project objectives are met.
- SI shall deploy Manpower during O&M phases. The deployed resource shall report to GSCDL and work closely with the GSCDL Project In-charge. SI may deploy additional resources based on the need of the Project and to meet the defined SLAs in this RFP. No additional cost will be paid by GSCDL for deployment of additional manpower required to meet the project objectives. Attendance register must be maintained at the ICCC for manpower and submitted along with invoice.

Key Experts

Sr No	Type of Resource	Minimum Qualification
1	Project Manager (1)	• Full Time MCA/ M.Tech (IT/Computer Science) /MBA IT from a reputed institute • Total Experience of at least 12 years in IT sector projects with Smart City / ULB / State Govt. / Central Govt. / PSUs • Should have more than 5 years of experience of handling such large IT projects as a project manager with Smart City / ULB / State Govt. / Central Govt. / PSUs • Should have PMP or Prince2 certification
2	Network Expert (to manage all internal and external networks) (1) (100% deployment 24*7)	• Full time MCA/M. Tech (IT/Computer Science)/MBA IT/B. Tech (IT/Computer Science/ECE) + MBA/B.E (IT/Computer Science/ECE) + MBA from a reputed institute • Total Experience: At least 8 years in IT sector projects with Smart City / ULB / State Govt. / Central Govt. / PSUs • Should have experience of more than 3 years in managing networks in large IT projects of similar nature with Smart City / ULB / State Govt. / Central Govt. / PSUs
3	Infrastructure Expert (Server, Storage and cloud services) (1) (100% deployment 24*7)	• MCA/M. Tech (IT/Computer Science)/MBA IT/B. Tech (IT/Computer Science/ECE) + MBA/B.E (IT/Computer Science/ECE) + MBA • Work experience of > 8 years as Expert in IT Sector projects with Smart City / ULB / State Govt. / Central Govt. / PSUs) • Work experience of at least 3 years in managing servers, storage, cloud services for large IT projects of similar nature with Smart City / ULB / State Govt. / Central Govt. / PSUs

***Network Expert and Infrastructure Expert have to be available 24*7*365 at ICCC.** Numbers provided for staff providing 24*7 support is excluding relievers. Payment will be made as quoted in BoQ subject to terms and conditions

Non Key Experts

Sr No	Type of Resource	Remarks
1	Field Support Manpower (6)	• Must be minimum graduate

Sr No	Type of Resource	Remarks
		• Field support manpower must be available 24 * 7 daily basis. 6 field support manpower must be available on daily basis. • Manpower shall work in 3 shifts, with no person being made to works for more than 8 hours at a stretch • Number of staffs providing the 24*7*365 support is excluding relievers. Deployment of field manpower must be planned in order to ensure 100% availability on daily basis. Failure to deploy 100% manpower will attract penalty. • Payment for field support manpower will be made as quoted in BoQ subject to terms and conditions

6.4.3 Stage-3 Commercial Evaluation

- All the technically qualified bidders will be notified to participate in Commercial Bid opening process.
- The commercial bids for the technically qualified bidders shall then be opened on the notified date and time and reviewed to determine whether the commercial bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.
- Commercial bids that are not as per the format provided in RFP shall be liable for rejection.
- The bid price shall include all taxes and levies and shall be in Indian Rupees and mentioned separately.
- Only fixed price financial bids indicating total price (inclusive of taxes) for all services specified in this bid document shall be considered.
- Any conditional bid would be rejected.
- Contract shall be awarded to the agency which shall be technically qualified and is computed based on 70% weightage to Technical Score (bidders qualifying with minimum score of 70) and 30% weightage to financial score called as H1 bidder
- Quality and Cost Based Selection (QCBS) method will be followed during the overall selection process. Based on the evaluation of technical proposal, the technically qualified bidders shall be ranked highest to lowest Technical Score (ST) in accordance to the marks obtained during the technical evaluation stage. 70% weightage will be given to technical score and 30% weightage to financial score.

  The individual bidder's technical score (ST) will be evaluated as per the formula given below:
  ST = 70% of the technical score received out of 100 (applicable only on scoring minimum 70/100)

  The individual bidder's financial score (SF) will be evaluated as per the formula given below:

  SF= [Fmin / Fb] x 100 (rounded off to 2 decimal places) where, SF= Normalized financial score of the bidder under consideration Fmin=Minimum financial quote among the technically qualified bidders Fb= Financial quote of the bidder under consideration

  The individual combined Score(S) will be evaluated as per the formula given below:
  Combined Score (S) = ST * 0.7 + SF * 0.3

  The bidder securing the highest evaluated Combined Score(S) will be awarded the contract observing due procedure.
- Errors & Rectification: Arithmetical errors shall be rectified on the following basis: "If there is a discrepancy between words and figures, the amount in words shall prevail".

- Financial bid needs to be uploaded on the portal as per the formats. The scanned copy should also be uploaded on the portal. The scanned sheet total should be same as the line items filled on the portal. In case of variation, the online portal data shall be taken into evaluation and scanned image will be rejected. However scanned document can have more line items under the major line items in case the bidder wants to provide the breakup. In no case, manually submitted financial bid document shall be entertained/ accepted.

6.4.4 Total Bid evaluation

The H1 bidder shall be invited for negotiations for awarding the contract. In case of a tie where two or more bidders achieve the same H1 score, the bidder with the higher Technical Score will be invited first for negotiations for awarding the contract.

7. Award of Contract

7.1 Notification of Award

Authority will notify the successful Bidder in writing by e-mail followed by courier. To be confirmed by the Bidder in writing by email followed by courier.

The bidder achieving H1 shall be invited for negotiations for awarding the contract. In case of a tie where two or more bidders achieve the same H1 score, the bidder with the higher Technical Score will be invited first for negotiations for awarding the contract.

7.2 Signing of Contract

After the notification of award, Authority will issue Work Order (WO). Accordingly, a contract shall be signed between successful bidder and Authority or the agency designated by Authority. As an acceptance of the WO, the Bidder shall sign and return back a duplicate copy of the Work Order to Authority or the agency designated by the Authority. The bidder shall return the duplicate copy along with a Performance Bank Guarantee **(Annexure 17)** within 15 working days from the date of issuance of WO

On receipt of the Performance Bank Guarantee, Authority or the agency designated by Authority shall enter into a contract with the successful bidder. The Contract Agreement is provided in RFP.

7.3 Performance Bank Guarantee

Within fifteen (15) working days from the date of issuance of WO, the successful Bidder shall at his own expense submit unconditional and irrevocable Performance Bank Guarantee (PBG) to the Authority. The PBG shall be from a Nationalized Bank or a Scheduled Commercial Bank in the format prescribed in RFP, payable on demand, for the due performance and fulfilment of the contract by the bidder.
This Performance Bank Guarantee shall be for an amount equivalent to 10% of total contract value. PBG shall be invoked by Authority, in the event the Bidder:

- fails to meet the overall penalty condition as mentioned in RFP or any changes agreed between the parties,
- fails to perform the responsibilities and obligations as set out in the RFP to the complete satisfaction of Authority,
- Misrepresents facts/information submitted to Authority.

The performance bank guarantee shall be valid till 6 months post completion of contract. The performance bank guarantee may be discharged/returned by Authority upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the performance bank guarantee.

In the event of the Bidder being unable to service the contract for whatever reason(s), Authority shall have the right to invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of Authority under the contract in the matter, the proceeds of the PBG shall be payable to Authority as compensation for any loss resulting from the bidder's failure to perform/comply its obligations under the contract.

Authority shall notify the bidder in writing of the exercise of its right to receive such compensation within 40 days, indicating the contractual obligation(s) for which the bidder is in default. Authority shall also be entitled to make recoveries from the bidder's bills, performance bank guarantee, or from any other amount due to him, an equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

In case the project is delayed beyond the project schedule as mentioned in RFP, the performance bank guarantee shall be accordingly extended by the Bidder till completion of extended period.

The successful bidder shall maintain a valid and binding Performance Guarantee for a period of 6 months after the expiry of the Contract Period ("Validity Period").

On satisfactory performance and completion of the order in all respects and duly certified to this effect by the Project Coordinator, Contract Completion Certificate shall be issued and the PBG would be returned to the Bidder.

7.4 Warranty & Maintenance

Bidder shall provide complete operations and maintenance services for all the proposed solution as outlined in this RFP.

During the warranty period, the bidder shall warrant that the goods supplied under the contract are new, unused, of the most recent version/models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The bidder further warrants that the goods supplied under this contract shall have no defects arising from design, materials or workmanship.
Authority or designated representatives of the bidder shall promptly notify successful bidder in writing of any claims arising under this warranty. Upon receipt of such notice, the bidder shall, within the warranty period and with all reasonable speed, repair or replace the defective systems, without costs to Authority and within time specified and acceptable to Authority. **During the entire O&M period under the contract, in case of any requirement of replacement of any component/software/license/any upgradation requirement which may arise due to any reason, the Selected Bidder will carry out required replacement without any cost to GSCDL. It must be ensured that the replacement component is of similar specification and functionality or higher. GSCDL's approval has to be taken before replacement is carried out. The O&M support must be comprehensive in nature. The replacement should not affect the existing integration and SLAs and must ensure data security and compliances, operational continuity and performance, contingency and roll back plans, documentation and knowledge transfer.**

If the successful bidder, having been notified, fails to remedy the defect(s) within the period specified in the contract, Authority may proceed to take such reasonable remedial action as may be necessary, at the successful bidder's risk and expense and without prejudice to any other rights, which Authority may have against the bidder under the contract.

During the comprehensive warranty period, the successful bidder shall provide all product(s) and documentation updates, patches/fixes, and version upgrades within 15 days of their availability and should carry out installation and make operational the same at no additional cost to Authority.
The successful bidder hereby warrants Authority that:

- The successful bidder shall be responsible for warranty services from licensers of products included in the systems.

- The successful bidder undertakes to ensure the maintenance of the acceptance criterion/standards in respect of the systems during the warranty period.
- **During the entire O&M period under the contract, in case of any requirement of replacement of any component/software/license/any upgradation requirement which may arise due to any reason, the Selected Bidder will carry out required replacement without any cost to GSCDL. It must be ensured that the replacement component is of similar specification and functionality or higher. GSCDL's approval has to be taken before replacement is carried out. The O&M support must be comprehensive in nature. The replacement should not affect the existing integration and SLAs.**

7.5 Failure to agree with the Terms and Conditions of RFP

Failure of the successful bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event Authority may award the contract to the next best value bidder or call for new bids. In such a case, Authority shall invoke the PBG and/or forfeit the EMD.

8. General Conditions of Contract

8.1 Definition of Terms

- "Applicable Law(s)" Any statute, law, ordinance, notification, rule, regulation, judgment, order, decree, bye-law, approval, directive, guideline, policy, requirement or other governmental restriction or any similar form of decision applicable to the relevant party and as may be in effect on the date of the execution of this Agreement and during the subsistence thereof, applicable to the Project.
- "Authority" means the Gandhinagar Smart City Development Limited. The project shall be executed in Gandhinagar and shall be owned by Gandhinagar Smart City Development Limited.
- "Bidder" shall mean organization/consortium submitting the proposal in response to this RFP.
- "Selected Bidder" means the bidder who is selected by the Authority at the end of this RFP process. The agency shall carry out all the services mentioned in the scope of work of this RFP.
- "Contract" means the Contract entered into by the parties with the entire documentation specified in the RFP.
- "Contract Value" means the price payable to Selected Bidder under this Contract for the full and proper performance of its contractual obligations.
- "Commercial Off-The-Shelf (COTS)" refers to software products that are ready-made and available for sale, lease, or license to the general public.
- "Data Centre Site" means the Data Centre sites including their respective Data Centre space, wherein the delivery, installation, integration, management and maintenance services as specified under the scope of work are to be carried out for the purpose of this contract.
- "Document" means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes, databases or any other electronic documents as per IT Act 2000.
- "Effective Date" means the date on which this Contract is signed or LoI is issued by Authority, whichever is earlier and executed by the parties hereto. If this Contract is executed in parts, then the date on which the last of such Contracts is executed shall be construed to be the Effective Date.
- "GCC" means General Conditions of Contract
- "Goods" means all of the equipment, sub-systems, hardware, software, products accessories, software and/or other material/items which SELECTED BIDDER is required to supply, install and maintain under the contract.
- "Integrated Command and Control Centre" OR "ICCC" means the center from where GSDCL/GMC/Gandhinagar Police department would conduct surveillance on security and civil issues on the entire Gandhinagar City.

- "Intellectual Property Rights" means any patent, copyright, trademark, trade name, service marks, brands, proprietary information whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.
- "Go- Live" means installation, testing, commissioning of project, and commencement of all smart city components, including training as per scope of work mentioned in RFP. Bidder should have the approval from Authority for user acceptance testing.
- "Notice" means: a notice; or a consent, approval or other communication required to be in writing under this Contract.
- "OEM" means the Original Equipment Manufacturer of any equipment/system/software/product which are providing such goods to the Authority under the scope of this RFP.
- "Bidder's Team" means SELECTED BIDDER who has to provide goods & services to the Authority under the scope of this Contract. This definition shall also include any and/or all of the employees of SELECTED BIDDER, authorized service providers/partners and representatives or other personnel employed or engaged either directly or indirectly by selected Bidder for the purposes of this Contract.
- "Replacement Service Provider" means the organization replacing SELECTED BIDDER in case of contract termination for any reasons
- "Sub-Contractor" shall mean the entity named in the contract for any part of the work or any person to whom any part of the contract has been sublet with the consent in writing of the Authority and the heirs, legal representatives, successors and assignees of such person.
- "SCC" means Special Conditions of Contract.
- "Services" means the work to be performed by the agency pursuant to this RFP and to the contract to be signed by the parties in pursuance of any specific assignment awarded by the Authority.
- "Server Room" or "Data Center" shall have the same meaning.

8.2 Interpretation

In this Contract unless a contrary intention is evident:

- the clause headings are for convenient reference only and do not form part of this Contract;
- unless otherwise specified a reference to a clause number is a reference to all of its sub-clauses;
- the word "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to" whether or not they are followed by such phrases;
- unless otherwise specified a reference to a clause, sub-clause or section is a reference to a clause, sub-clause or section of this Contract including any amendments or modifications to the same from time to time;
- a word in the singular includes the plural and a word in the plural includes the singular;
- a word importing a gender includes any other gender;
- a reference to a person includes a partnership and a body corporate;
- a reference to legislation includes legislation repealing, replacing or amending that legislation;
- Where a word or phrase is given a particular meaning it includes the appropriate grammatical forms of that word or phrase which have corresponding meanings.
- In the event of an inconsistency between the terms of this Contract and the RFP and the Bid, the terms hereof shall prevail.

8.3 Condition Precedent

This Contract is subject to the fulfillment of the following conditions precedent by Selected Bidder.

- Furnishing by Selected Bidder, an unconditional and irrevocable Performance Bank Guarantee (PBG) and acceptable to the Authority which would remain valid until such time as stipulated by the Authority.

- Obtaining of all statutory and other approvals required for the performance of the Services under this Contract. This may include approvals/clearances, wherever applicable, that may be required for execution of this contract e.g. clearances from Government authorities for importing equipment, exemption of Tax/Duties/Levies, work permits/clearances for Bidder/Bidder's team, etc.
- Furnish notarized copies of any/all contract(s) duly executed by Selected Bidder and its OEMs existing at the time of signing of this contract in relation to the Authority's project. Failure to do so within stipulated time of signing of contract would attract penalty as defined in this Section.
- Furnishing of such other documents as the Authority may specify/demand.
- The Authority reserves the right to waive any or all of the conditions specified in Clause 3 above in writing and no such waiver shall affect or impair any right, power or remedy that the Authority may otherwise have.
- In the event that any of the conditions set forth in Clause 3 hereinabove are not fulfilled within 1 months from the date of this Contract, or such later date as may be mutually agreed upon by the parties, the Authority may terminate this Contract.
- In case there is a contradiction between the sections, the below hierarchy of sections in order of precedence :
- Pre-bid clarification and Corrigendum, if any
- Scope of work in this RFP
- Annexures of RFP
- RFP

8.4 Scope of Work

Scope of the work shall be as defined in RFP and Annexures thereto of the tender.

- Authority has engaged Selected Bidder to provide services related to implementation of Operations and Maintenance of Smart City Components and Integrated Command & Control Center of Gandhinagar Smart City Development Limited using which the Authority intends to perform its business operations. Selected Bidder is required to provide such goods, services and support as the Authority may deem proper and necessary, during the term of this Contract, and includes all such processes and activities which are consistent with the proposals set forth in the Bid, the Tender and this Contract and are deemed necessary by the Authority, in order to meet its business requirements (hereinafter 'scope of work'). The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 30 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.
- The SELECTED BIDDER shall ensure the continued successful operations and maintenance of the existing Adaptive Traffic Control System (ATCS), Traffic Enforcement System (TES), General Surveillance, Geographic Information System (GIS) components and others in the RFP in Gandhinagar city, including their extension to new areas as defined in this RFP. The SELECTED BIDDER is also responsible for incorporating any additional functionalities identified during the extension's assessment or requirement gathering phase, with no extra charges, to meet the needs of GSCDL. The SI shall manage and support the following systems and components: ATMS, TES (including RLVD and SVD), General Surveillance, and integration with the existing Integrated Command and Control Center, ensuring compatibility with both Cloud-based and On-premise Data Centers and Disaster Recovery solutions. Integration must be consistent with the current architecture and include the subsystems already operational in the city or planned for future implementation.

- Detailed scope of work have been mentioned in section 12 of the RFP which need to be followed by the selected Bidder

8.5 Key Performance Measurement

Unless specified by the Authority to the contrary, Selected Bidder shall deliver the goods, perform the services and carry out the scope of work in accordance with the terms of this Contract, Scope of Work and the Service Specifications as laid down under Service Level Agreement of this section.
If the Contract, scheduled requirements, service specification includes more than one document, then unless the Authority specifies to the contrary, the later in time shall prevail over a document of earlier date to the extent of any inconsistency.

The Authority reserves the right to amend any of the terms and conditions in relation to the Contract/Service Specifications and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the Schedule of Requirements.

8.6 Commencement of Progress

Selected Bidder shall subject to the fulfillment of the conditions precedent above, commence the performance of its obligations in a manner as per the Scope of Work. The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 30 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.

Selected Bidder shall proceed to carry out the activities/services with diligence and expedition in accordance with any stipulation as to the time, manner, mode, and method of execution contained in this Contract.

Selected Bidder shall be responsible for and shall ensure that all activities/services are performed in accordance with the Contract, Scope of Work and Service Specifications and that Selected Bidder's Team complies with such Specifications and all other standards, terms and other stipulations/conditions set out hereunder.

Selected Bidder shall perform the activities/services and carry out its obligations under the Contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the industry and shall observe sound management, engineering and security practices. Selected Bidder shall always act, in respect of any matter relating to this Contract, as faithful advisors to the Authority and shall, at all times, support and safeguard the Authority's legitimate interests in any dealings with Third parties.

8.7 Standards of Performance

Selected Bidder shall perform the Services and carry out its obligations under the Contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and best practices used in the industry and with IT standards recognized by international professional bodies and shall observe sound management, engineering and security practices. It shall employ appropriate advanced technology and engineering practices and safe and effective equipment, machinery, material and methods. Selected Bidder shall always act, in respect of any matter relating to the Contract, as faithful advisors to the Authority and shall, at all times, support and safeguard the Authority's legitimate interests in any dealings with Third Parties.

8.8 Approvals and Required Consents

The Authority shall extend necessary support to Selected Bidder to obtain, maintain and observe all relevant and customary regulatory and governmental licenses, clearances and applicable approvals

(hereinafter the "Approvals") necessary for Selected Bidder to provide the Services. The costs of such Approvals shall be borne by SELECTED BIDDER. Both parties shall give each other all co-operation and information reasonably.

The Authority shall also provide necessary support to Bidder in obtaining the Approvals. In the event that any Approval is not obtained, Selected Bidder and the Authority shall co-operate with each other in achieving a reasonable alternative arrangement as soon as reasonably practicable for the Authority, to continue to process its work with as minimal interruption to its business operations as is commercially reasonable until such Approval is obtained, provided that SELECTED BIDDER shall not be relieved of its obligations to provide the Services and to achieve the Service Levels until the Approvals are obtained if and to the extent that Selected Bidder's obligations are dependent upon such Approvals.

8.9 Bidder's Obligations

- Selected Bidder's obligations shall include all the activities as specified by the Authority in the Scope of Work and other sections of the Tender and Contract and changes thereof to enable Authority to meet the objectives and operational requirements. It shall be Selected Bidder's responsibility to ensure the proper and successful implementation, performance and continued operation of the proposed solution in accordance with and in strict adherence to the terms of his Bid, the Tender and this Contract.
- The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 45 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.
- In addition to the aforementioned, Selected Bidder shall provide services to manage and maintain the said system and infrastructure as mentioned in RFP
- Authority reserves the right to interview the personnel proposed that shall be deployed as part of the project team. If found unsuitable, the Authority may reject the deployment of the personnel. But ultimate responsibility of the project implementation shall lie with Selected Bidder
- Authority reserves the right to require changes in personnel which shall be communicated to Selected Bidder. Selected Bidder with the prior approval of the Authority may make additions to the project team. Selected Bidder shall provide the Authority with the resume of Key Personnel and provide such other information as the Authority may reasonably require. The Authority also reserves the right to interview the personnel and reject, if found unsuitable. In case of change in its team members, for any reason whatsoever, Selected Bidder Shall also ensure that the exiting members are replaced with at least equally qualified and professionally competent members.
- Selected Bidder shall ensure that none of the Key Personnel as mentioned in RFP and manpower exit from the project during first 6 months of the beginning of the project. In such cases of exit, a penalty of INR 2 lacs per such replacement shall be imposed on SELECTED BIDDER.
- Selected Bidder should submit profiles of only those resources who shall be deployed on the project. Any change of resource should be approved by the Authority and compensated with equivalent or better resource. The Authority may interview the resources suggested by SELECTED BIDDER before their deployment on board. It does not apply in case of change requested by the Authority.
- In case of change in its team members, Selected Bidder shall ensure a reasonable amount of time overlap in activities to ensure proper knowledge transfer and handover/takeover of documents and other relevant materials between the outgoing and the new member.
- Selected Bidder shall ensure that Selected Bidder's Team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract. SELECTED BIDDER shall ensure that the services are performed through the efforts of Selected Bidder's Team, in accordance with the terms hereof and to the satisfaction of the Authority. Nothing in this Contract relieves Selected Bidder from its liabilities or obligations under this Contract to provide the Services in accordance with the Authority's directions and requirements and as stated in this Contract and the Bid to the extent accepted by the Authority and Selected Bidder shall be liable for any non- performance, non-compliance,

breach or other loss and damage resulting either directly or indirectly by or on account of its Team.

- Selected Bidder shall be fully responsible for deployment/installation/development and integration of all the software and hardware components and resolve any problems/issues that may arise due to integration of components.
- Selected Bidder shall ensure that the OEMs supply equipment/components including associated accessories and software required and shall support Selected Bidder in the installation, commissioning, integration and maintenance of these components during the entire period of contract. SELECTED BIDDER shall ensure that the COTS OEMs supply the software applications and shall support Selected Bidder in the installation/deployment, integration, roll-out and maintenance of these applications during the entire period of contract. It must clearly be understood by Selected Bidder that warranty and O&M of the system, products and services incorporated as part of system would commence from the effective date of the respective phase including all the solutions proposed. Selected Bidder would be required to explicitly display that he/they have a back to back arrangement for provisioning of warranty/O&M support till the end of contract period with the relevant OEMs. The annual maintenance support shall include patches and updates the software, hardware components and other devices.
- All the software licenses that Selected Bidder proposes should be perpetual software licenses valid for life. The software licenses shall not be restricted based on location and the Authority should have the flexibility to use the software licenses for other requirements if required.
- All the OEMs that Bidder proposes should have Dealer possession licenses.
- The Authority reserves the right to review the terms of the Warranty and Annual Maintenance agreements entered into between Selected Bidder and OEMs and no such agreement/contract shall be executed, amended, modified and/or terminated without the prior written consent of the Authority. An executed copy of each of such agreements/contracts shall, immediately upon execution be submitted by Selected Bidder to the Authority.
- Selected Bidder shall ensure that none of the components and sub-components is declared end-of-sale or end-of-support by the respective OEM at the time of submission of bid. If the OEM declares any of the products/solutions end-of-sale subsequently, the Selected Bidder shall ensure that the same is supported by the respective OEM for contract period.
- If a product is de-supported by the OEM for any reason whatsoever, from the date of Acceptance of the System till the end of contract, Selected Bidder should replace the products/solutions with an alternate (without affecting the overall functionality) that is acceptable to the Authority at no additional cost to the Authority and without causing any performance degradation.
- The Licenses will be in the name of Authority only.
- Selected Bidder shall ensure that the OEMs provide the support and assistance to Selected Bidder in case of any problems/issues arising due to integration of components supplied by him with any other component(s)/product(s) under the purview of the overall solution. If the same is not resolved for any reason whatsoever, Selected Bidder shall replace the required component(s) with an equivalent or better substitute that is acceptable to Authority without any additional cost to the Authority and without impacting the performance of the solution in any manner whatsoever.
- Selected Bidder shall ensure that the OEMs for hardware servers/equipment supply and/or installation of all type of updates, patches, fixes and/or bug fixes for the firmware or software from time to time at no additional cost to the Authority.
- Selected Bidder shall ensure that the OEMs for hardware servers/equipment or Bidder's trained engineers conduct the preventive maintenance on a Quarterly basis and break-fix maintenance in accordance with the best practices followed in the industry. Selected Bidder shall ensure that the documentation and training services associated with the components shall be provided by the OEM partner or OEM's certified training partner without any additional cost to the Authority.
- The training has to be conducted using official OEM course curriculum mapped with the hardware/Software Product's to be implemented in the project.
- Selected Bidder and their personnel/representative shall not alter/change/replace any hardware component proprietary to the Authority and/or under warranty or O&M of third party without prior consent of the Authority.

- Selected Bidder shall provision the required critical spares/components at the designated Datacenter Sites/office locations of the Authority for meeting the uptime commitment of the components supplied by him.
- Selected Bidder's representative(s) shall have all the powers requisite for the execution of scope of work and performance of services under this contract. Selected Bidder's representative(s) shall liaise with the Authority's representative for the proper coordination and timely completion of the works and on any other matters pertaining to the works. Selected Bidder shall extend full co-operation to Authority's representative in the manner required by them for supervision/inspection/observation of the equipment/goods/material, procedures, performance, progress, reports and records pertaining to the works. He shall also have complete charge of Selected Bidder's personnel engaged in the performance of the works and to ensure compliance of rules, regulations and safety practice. He shall also cooperate with the other Service Providers/Vendors of the Authority working at the Authority's office locations & field locations and DC site. Such Bidder's representative(s) shall be available to the Authority's Representative at respective Datacenter during the execution of works.
- Selected Bidder shall be responsible on an ongoing basis for coordination with other vendors and agencies of the Authority in order to resolve issues and oversee implementation of the same. Selected Bidder shall also be responsible for resolving conflicts between vendors in case of borderline integration issues.
- Selected Bidder is expected to set up a project office in Ahmedabad/Gandhinagar City. The technical manpower deployed on the project should work from the same office. However, some resources may be required to work from the client office during the contract period.
- A separate schedule for dismantling and reinstallation charges has been provided as a part of this RFP. The said charges will be valid for the entire contract duration. The quantities mentioned in the schedule 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 finalised rate under this RFP for the entire contract period.
- Any upgradations required in the existing system including applications, IT / Non IT infrastructure, network , EMS/NMS must be carried out by the bidder at no cost to authority.
- Reporting Procedures as defined in the RFP must be followed by the selected Bidder.

8.10 Access to ICCC

The Authority's representative upon receipt of request from Selected Bidder intimating commencement of activities at various locations shall give to Selected Bidder access to as much of the ICCC as may be necessary to enable SELECTED BIDDER to commence and proceed with the installation of the works in accordance with the program of work. Any reasonable proposal of Selected Bidder for access to ICCC to proceed with the installation of work in accordance with the program of work shall be considered for approval and shall not be unreasonably withheld by the Authority. Such requests shall be made to the Authority's representative in writing at least 7 days prior to start of the work.

At the ICCC locations, the Authority's representative shall give to Selected Bidder access to as much as may be necessary to enable Selected Bidder to commence and proceed with the installation of the works in accordance with the program of work or for performance of Facilities Management Services.

8.11 Start of Installation – Dismantled Components

Authority may ask the selected bidder to install components which may have been dismantled previously. Bidder shall co-ordinate with the Authority and stakeholders for the complete setup of sites before commencement of installation of these components and take approval from authority before installation of these components. As per TRAI guidelines, resale of bandwidth connectivity is not allowed. In such a case tripartite agreement should be formed between Authority, selected Bidder and Internet Service Provider(s). Any product supplied must have better specifications than the existing component's specification.

8.12 Reporting Procedures

- Selected Bidder shall monitor progress of all the activities related to the execution of this contract and shall submit to the Authority, progress reports with reference to all related works along with invoice. Reports may also need to be submitted based on need of GSCDL. Certain reports need to be sent on daily basis, quarterly basis, monthly basis which need to be adhered to without fail by selected bidder. Indicative reports to be sent to GSCDL are mentioned below. However authority may ask for additional reports over and above the reports mentioned below
    - Inventory details including lat long details and working/not working details
    - Security Audit Reports
    - All compliance reports
    - DC DR Drill Reports
    - EMS reports (in case the selected bidder feels that EMS needs some enhancements, to include more components then bidder has to do it at their own cost without any cost to GSCDL.
    - Bandwidth utilization reports
    - Latency and packet loss reports
    - Field visit reports
    - IT / Non IT devices inspection reports
    - Modifications in networks
    - As built drawings / electrical cabling / network diagrams as and when required by GSCDL
- Cost related to the reports will be borne by the selected bidder. Activities related to the reports mentioned above will be the responsibility of the selected bidder(at no cost to GSCDL)
- Formats for all above mentioned reports and their dissemination mechanism shall be discussed and finalized along with project plan. The Authority on mutual agreement between both parties may change the formats, periodicity and dissemination mechanism for such reports.
- Periodic meetings shall be held between the representatives of the Authority and Selected Bidder once in every 15 days during the project to discuss the progress. Selected Bidder will ensure that all concerned personnel are present during such meetings.
- Several review committees involving representative of the Authority and senior officials of Selected Bidder may be formed for the purpose of this project. These committees shall meet at intervals, as decided by the Authority later, to oversee the progress of the project.
- All the goods, services and manpower to be provided/deployed by Selected Bidder under the Contract and the manner and speed of execution and maintenance of the work and services are to be conducted in a manner to the satisfaction of Authority's representative in accordance with the Contract.
- The Authority reserves the right to inspect and monitor/assess the progress/performance of the work/services at any time during the course of the Contract. The Authority may demand and upon such demand being made, Selected Bidder shall provide documents, data, material or any other information which the Authority may require, to enable it to assess the progress/performance of the work/service.
- At any time during the course of the Contract, the Authority shall also have the right to conduct, either itself or through another agency as it may deem fit, an audit to monitor the performance by Selected Bidder of its obligations/functions in accordance with the standards committed to or required by the Authority and Selected Bidder undertakes to cooperate with and provide to the Authority/any other agency appointed by the Authority, all Documents and other details as may be required by them for this purpose. Such audit shall not include Bidder's books of accounts.
- Should the rate of progress of the works or any part of them at any time fall behind the stipulated time for completion or is found to be too slow to ensure completion of the works by the stipulated time, or is in deviation to Tender requirements/standards, the Authority's representative shall so notify Selected Bidder in writing.
- Selected Bidder shall reply to the written notice giving details of the measures he proposes to take to expedite the progress so as to complete the works by the prescribed time or to ensure

compliance to RFP requirements. Selected Bidder shall not be entitled to any additional payment for taking such steps. If at any time it should appear to the Authority or Authority's representative that the actual progress of work does not conform to the approved plan Selected Bidder shall produce at the request of the Authority's representative a revised plan showing the modification to the approved plan necessary to ensure completion of the works within the time for completion or steps initiated to ensure compliance to the stipulated requirements

- The submission seeking approval by the Authority or Authority's representative of such plan shall not relieve Selected Bidder of any of his duties or responsibilities under the Contract.
- In case during execution of works, the progress falls behind schedule or does not meet the Tender requirements, Selected Bidder shall deploy extra manpower/resources to make up the progress or to meet the RFP requirements. Plan for deployment of extra man power/resources shall be submitted to the Authority for its review and approval. All time and cost effect in this respect shall be borne, by Selected Bidder within the contract value.

8.13 Knowledge of ICCC

- Selected Bidder shall be granted access to ICCC for inspection by the Authority before commencement of project. The plan shall be drawn mutually at a later stage.
- Selected Bidder shall be deemed to have knowledge of the ICCC and its surroundings and information available in connection therewith and to have satisfied itself the form and nature thereof including, the data contained in the Bidding Documents, the physical and climatic conditions, the quantities and nature of the works and materials necessary for the completion of the works, the means of access, etc. and in general to have obtained itself all necessary information of all risks, contingencies and circumstances affecting his obligations and responsibilities therewith under the Contract and his ability to perform it. However, if Selected Bidder detects physical conditions and/or obstructions affecting the work, Selected Bidder shall take all measures to overcome them.

8.14 Project Plan

Within 15 calendar days of effective date of the contract/Issuance of LoI, SELECTED BIDDER shall submit to the Authority for its approval a detailed Project Plan with details of the Project showing the sequence, procedure and method in which he proposes to carry out the works. The Plan so submitted by SELECTED BIDDER shall conform to the requirements and timelines specified in the Contract. The Authority and SELECTED BIDDER shall discuss and agree upon the work procedures to be followed for effective execution of the works, which SELECTED BIDDER intends to deploy and shall be clearly specified. The Project Plan shall include but not limited to project organization, communication structure, proposed staffing, roles and responsibilities, processes and tool sets to be used for quality assurance, security and confidentiality practices in accordance with industry best practices, project plan and delivery schedule in accordance with the Contract.

Approval by the Authority's Representative of the Project Plan shall not relieve SELECTED BIDDER of any of his duties or responsibilities under the Contract.

If SELECTED BIDDER's work plans necessitate a disruption/shutdown in Authority's operation, the plan shall be mutually discussed and developed so as to keep such disruption/shutdown to the barest unavoidable minimum. Any time and cost arising due to failure of SELECTED BIDDER to develop/adhere such a work plan shall be to his account.

8.15 Adherence to safety procedures, rules regulations and restriction

- SELECTED BIDDER's Team shall comply with the provision of all laws including labor laws, rules, regulations and notifications issued there under from time to time. All safety and labor laws enforced by statutory agencies and by Authority shall be applicable in the performance of this Contract and Bidder's Team shall abide by these laws.

- Access to the Data Center's Server Room, ICCC shall be strictly restricted. No access to any person except the essential members of SELECTED BIDDER's Team who are authorized by the Authority and are genuinely required for execution of work or for carrying out management/maintenance shall be allowed entry. Even if allowed, access shall be restricted to the pertaining equipment of the Authority only. SELECTED BIDDER shall maintain a log of all activities carried out by each of its team personnel.
- No access to any staff of bidder, except the essential staff who has genuine work- related need, should be given. All such access should be logged in a loss free manner for permanent record with unique biometric identification of the staff to avoid misrepresentations or mistakes
- SELECTED BIDDER shall take all measures necessary or proper to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. SELECTED BIDDER's Team shall adhere to all security requirement/regulations of the Authority during the execution of the work. Authority's employee also shall comply with safety procedures/policy.
- SELECTED BIDDER shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.

8.16 Statutory Requirements

During the tenure of this Contract nothing shall be done by SELECTED BIDDER or his team in contravention of any law, act and/or rules/regulations, there under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep Authority indemnified in this regard.

8.17 Authority's Obligation

- Authority or his/her nominated representative shall act as the nodal point for implementation of the contract and for issuing necessary instructions, approvals, commissioning, acceptance certificates, payments etc. to SELECTED BIDDER.
- Authority shall ensure that timely approval is provided to SELECTED BIDDER as and when required, which may include approval of project plans, implementation methodology, design documents, specifications, or any other document necessary in fulfillment of this contract.
- The Authority's representative shall interface with SELECTED BIDDER, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. Authority shall provide adequate cooperation in providing details, coordinating and obtaining of approvals from various governmental agencies, in cases, where the intervention of the Authority is proper and necessary.
- Authority may provide on Bidder's request, particulars/information/or documentation that may be required by SELECTED BIDDER for proper planning and execution of work and for providing services covered under this contract and for which SELECTED BIDDER may have to coordinate with respective vendors.
- Authority shall provide to SELECTED BIDDER only sitting space and basic infrastructure not including, stationery and other consumables at the Authority's office locations.
- Authority reserves the right to procure the hardware including devices on quarterly basis in first year based on actual deployment and O&M shall be applicable whenever the devices are procured and deployed till end of the contract.
- Site Not Ready: Authority hereby agrees to make the project sites ready as per the agreed specifications, within the agreed timelines. Authority agrees that SELECTED BIDDER shall not be in any manner liable for any delay arising out of Authority's failure to make the site ready within the stipulated period.

8.18 Payments

- Authority shall make payments to SELECTED BIDDER at the times and in the manner set out in the Payment schedule as specified Payment Milestones in RFP subject to the penalties as mentioned under Service Level Agreement. Authority shall make all efforts to make payments to

SELECTED BIDDER within 45 days of receipt of invoice(s) and all necessary supporting documents. No interest will be payable.

- The SELECTED BIDDER shall directly interact with electricity boards for provision of mains power supply at all desired locations. The SELECTED BIDDER shall be responsible to submit the electricity bill including connection charge, meter charge, recurring charges etc. to the electricity board directly for all applicable components. SELECTED BIDDER shall have to submit the challan of bill submission to GSCDL. GSCDL will reimburse the amount submitted to the SELECTED BIDDER after verification in next billing cycle.
- All payments agreed to be made by Authority to SELECTED BIDDER in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable, if any, and Authority shall not be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services.
- No invoice for extra work/change order on account of change order shall be submitted by SELECTED BIDDER unless the said extra work/change order has been authorized/approved by the Authority in writing in accordance with Change Control Note (Annexure 19 of this section of the RFP)
- In the event of Authority noticing at any time that any amount has been disbursed wrongly to SELECTED BIDDER or any other amount is due from SELECTED BIDDER to the Authority, the Authority may without prejudice to its rights recover such amounts by other means after notifying SELECTED BIDDER or deduct such amount from any payment falling due to SELECTED BIDDER. The details of such recovery, if any, shall be intimated to SELECTED BIDDER. SELECTED BIDDER shall receive the payment of undisputed amount under subsequent invoice for any amount that has been omitted in previous invoice by mistake on the part of the Authority or SELECTED BIDDER.
- All payments to SELECTED BIDDER shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under any law, rule or regulation. All costs, damages or expenses which Authority may have paid or incurred, for which under the provisions of the Contract, SELECTED BIDDER is liable, the same shall be deducted by Authority from any dues to SELECTED BIDDER. All payments to SELECTED BIDDER shall be made after making necessary deductions as per terms of the Contract and recoveries towards facilities, if any, provided by the Authority to SELECTED BIDDER on chargeable basis.

8.19 Intellectual Property Rights

- Retention of Ownership except for the rights expressly granted to the Licensee under this Agreement, the Licensor shall retain all right, title and interest in and to the Licensed Technology, including all worldwide Technology and intellectual property and proprietary rights.
- Preservation of Notice Licensee shall not remove, efface or obscure any copyright notices or other proprietary notices or legends from any Licensed Technology or materials provided under this Agreement, and shall reproduce all such notices and legends when incorporating Licensed Technology or materials into any Integrated Products.
- Authority shall own and have a right in perpetuity to use all newly created Intellectual Property Rights which have been developed solely during execution of this Contract, including but not limited to all processes, products, specifications, reports and other documents which have been newly created and developed by SELECTED BIDDER solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract. SELECTED BIDDER undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the Authority, execute all such agreements/documents and obtain all permits and approvals that may be necessary in regard to the Intellectual Property Rights of the Authority.
- Pre-existing work: All intellectual property rights existing prior to the Effective Date of this Agreement shall belong to the Party that owned such rights immediately prior to the Effective Date. Subject to the foregoing, the Authority will also have rights to use and copy all intellectual property rights, process, specifications, reports and other document, drawings, manuals etc. provided or used by the SELECTED BIDDER / Consortium / subcontractors as part of the Scope

of Works under this Agreement for the purpose of this Agreement on non-exclusive, non-transferable, perpetual, royalty-free license to use basis.

- COTS/ third party products: All Commercially off the Shelf (COTS) products and related solutions and fixes provided pursuant to this Agreement shall be licensed according to the terms of the license agreement packaged with or otherwise applicable to such products. Such licenses shall be brought on behalf of and in the name of the Authority or mentioning the Authority as the end user of such licenses.
- SELECTED BIDDER shall be responsible for arranging any licenses associated with products. "Product" means any computer code, web-based services, or materials comprising commercially released, pre-release or beta products (whether licensed for a fee or no charge) and any derivatives of the foregoing which are made available to the Purchaser for license which is published by product owner or its affiliates, or a third party. "Fixes" means product fixes that are either released generally (such as commercial product service packs) or that are provided to you when performing services (such as workarounds, patches, bug fixes, beta fixes and beta builds) and any derivatives of the foregoing. Unless otherwise specifically restricted by the Licensing Terms of the COTS products, all intellectual property rights in any development/enhancement/customization etc. done on the COTS products pursuant to this Agreement shall be owned by the Authority.
- Further, the SELECTED BIDDER shall be obliged to ensure that all approvals, registrations, licenses, permits and rights which are, inter-alia, necessary for use of the Deliverables, goods, services, applications, services etc. provided by the SELECTED BIDDER / Consortium / subcontractors under this Agreement shall be acquired in the name of the Authority and to use such licenses till the Term on behalf of the Authority solely for the purpose of execution of any of its obligations under the terms of this Agreement. However, subsequent to the term of this Agreement, such approvals etc. shall endure to the exclusive benefit of the Authority.
- SELECTED BIDDER shall not copy, reproduce, translate, adapt, vary, modify, disassemble, decompile or reverse engineer or otherwise deal with or cause to reduce the value of the Materials except as expressly authorized by Authority in writing.

8.20 Taxes

- SELECTED BIDDER shall bear all personnel taxes levied or imposed on its personnel, or any other member of SELECTED BIDDER's Team, etc. on account of payment received under this Contract. SELECTED BIDDER shall bear all corporate taxes, levied or imposed on SELECTED BIDDER on account of payments received by it from the Authority for the work done under this Contract.
- SELECTED BIDDER shall bear all taxes and duties etc. levied or imposed on SELECTED BIDDER under the Contract including but not limited to Sales Tax, Customs duty, Excise duty, Octroi, Service Tax, GST and relevant amendments Works Contracts Tax and all Income Tax levied under Indian Income Tax Act – 1961 or any amendment thereof during the entire contract period, i.e., on account of material supplied and services rendered and payments received by him from the Authority under the Contract. It shall be the responsibility of SELECTED BIDDER to submit to the concerned Indian authorities the returns and all other connected documents required for this purpose. SELECTED BIDDER shall also provide the Authority such information, as it may be required in regard to SELECTED BIDDER's details of payment made by the Authority under the Contract for proper assessment of taxes and duties. The amount of tax withheld by the Authority shall at all times be in accordance with Indian Tax Law and the Authority shall promptly furnish to SELECTED BIDDER original certificates for tax deduction at source and paid to the Tax Authorities.
- SELECTED BIDDER agrees that he shall comply with the Indian Income Tax Act in force from time to time and pay Indian Income Tax, as may be imposed/levied on them by the Indian Income Tax Authorities, for the payments received by them for the works under the Contract
- SELECTED BIDDERs shall fully familiarize themselves about the applicable domestic taxes (such as value added or sales tax, service tax, income taxes, duties, fees, levies, etc.) on amounts payable by the Authority under the Agreement. All such taxes must be included by Bidders in the financial proposal. (Bidder to find out applicable taxes for the components being proposed.)

- Should SELECTED BIDDER fail to submit returns/pay taxes in times as stipulated under applicable Indian/State Tax Laws and consequently any interest or penalty is imposed by the concerned authority, SELECTED BIDDER shall pay the same. SELECTED BIDDER shall indemnify Authority against any and all liabilities or claims arising out of this Contract for such taxes including interest and penalty by any such Tax Authority may assess or levy against the Authority/Prime Bidder.
- The Sales Tax/VAT on works (central or state) if levied on supplies made from indigenous vendors for the works shall be borne by SELECTED BIDDER within the Contract Price. Service Tax/Terminal Sales Tax/Works Contract Tax, etc., if any applicable, shall be payable extra, at actuals by the Authority in accordance with the conditions of the Contract and upon submission of proof of payment of such taxes.
- The Authority shall if so required by applicable laws in force, at the time of payment, deduct income tax payable by SELECTED BIDDER at the rates in force, from the amount due to SELECTED BIDDER and pay to the concerned tax authority directly.

8.21 Indemnity

- SELECTED BIDDER shall indemnify the Authority from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind howsoever suffered, arising or incurred inter alia during and after Contract period out of: any negligence or wrongful act or omission by SELECTED BIDDER or any third party associated with SELECTED BIDDER in connection with or incidental to this Contract; or
- any infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied goods and related services or any part thereof
- Regardless of anything contained (except for SELECTED BIDDER's liability for bodily injury arising out of gross negligence or wilful misconduct for which it is legally liable and it's liability for patent and copyright infringement in accordance with the terms of this Agreement) the total liability of SELECTED BIDDER, is restricted to the total value of the contract and SELECTED BIDDER is not responsible for any third party claims.

8.22 Warranty

- A comprehensive warranty applicable on goods supplied under this contract shall be provided for the remaining period of contract from the date of acceptance of respective system by the Authority.
- **During the entire O&M period under the contract, in case of any requirement of replacement of any component/software/license/any upgradation requirement which may arise due to any reason, the Selected Bidder will carry out required replacement without any cost to GSCDL. It must be ensured that the replacement component is of similar specification and functionality or higher. GSCDL's approval has to be taken before replacement is carried out. The O&M support must be comprehensive in nature. The replacement should not affect the existing integration and SLAs.**
- Technical Support for Software applications shall be provided by the respective OEMs for the period of contract. The Technical Support should include all upgrades, updates and patches to the respective Software applications.
- The SELECTED BIDDER warrants that the Goods supplied under the Contract are new, non-refurbished, unused and recently manufactured; shall not be nearing End of sale/End of support; and shall be supported by the SELECTED BIDDER and respective OEM along with service and spares support to ensure its efficient and effective operation for the entire duration of the contract (I.e 24 months)
- The SELECTED BIDDER warrants that the goods supplied under this contract shall be of the highest grade and quality and consisted with the established and generally accepted standards for materials of this type. The goods shall be in full conformity with the specifications and shall operate properly and safely. All recent design improvements in goods, unless provided otherwise in the Contract, shall also be made available.

- The SELECTED BIDDER further warrants that the Goods supplied under this Contract shall be free from all encumbrances and defects/faults arising from design, material, manufacture or workmanship (except insofar as the design or material is required by the Authority's Specifications) or from any act or omission of the SELECTED BIDDER, that may develop under normal use of the supplied Goods in the conditions prevailing at the respective Datacenter/Server Room Sites.
- The Authority shall promptly notify the SELECTED BIDDER in writing of any claims arising under this warranty.
- Upon receipt of such notice, the SELECTED BIDDER shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the Authority may have against the SELECTED BIDDER under the Contract.
- If the SELECTED BIDDER, having been notified, fails to remedy the defect(s) within a reasonable period, the Authority may proceed to take such remedial action as may be necessary, at the SELECTED BIDDER's risk and expense and without prejudice to any other rights which the Authority may have against the SELECTED BIDDER under the Contract.
- Any OEM specific warranty terms that do not conform to conditions under this Contract shall not be acceptable.

8.23 Term and Extension of the Contract

- The Contract period shall commence from the date of signing of contract or Issuance of LoI, whichever is earlier, and shall remain valid for 24 Months from the date of signing of contract.
- If the delay occurs due to circumstances beyond control of SELECTED BIDDER such as strikes, lockouts, fire, accident, defective materials, delay in approvals or any cause whatsoever beyond the reasonable control of SELECTED BIDDER, a reasonable extension of time shall be granted by the Authority.
- The Authority shall reserve the sole right to grant any extension to the term abovementioned and shall notify in writing to SELECTED BIDDER, at least 3 (three) months before the expiration of the Term hereof, whether it shall grant SELECTED BIDDER an extension of the Term. The decision to grant or refuse the extension shall be at the Authority's discretion and such extension of the contract, if any, shall be as per terms agreed mutually between the Authority and SELECTED BIDDER.
- Where the Authority is of the view that no further extension of the term be granted to SELECTED BIDDER, the Authority shall notify SELECTED BIDDER of its decision at least 3 (three) months prior to the expiry of the Term. Upon receipt of such notice, SELECTED BIDDER shall continue to perform all its obligations hereunder, until such reasonable time beyond the Term of the Contract within which, the Authority shall either appoint an alternative agency/SELECTED BIDDER or create its own infrastructure to operate such Services as are provided under this Contract.

8.24 Dispute Resolution

- In case, a dispute is referred to arbitration, the arbitration shall be under the Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re- enactment thereof.
- If during the subsistence of this Contract or thereafter, any dispute between the Parties hereto arising out of or in connection with the validity, interpretation, implementation, material breach or any alleged material breach of any provision of this Contract or regarding any question, including as to whether the termination of this Contract by one Party hereto has been legitimate, the Parties hereto shall endeavor to settle such dispute amicably and/or by Conciliation to be governed by the Arbitration and Conciliation Act, 1996 or as may be agreed to between the Parties. 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 thirty (30) days, gives thirty (30) day notice to refer the dispute to arbitration to the other Party in writing.
- The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.
    - The Arbitration proceedings shall be held in Gandhinagar, Gujarat, India.

  - The Arbitration proceeding shall be governed by the substantive laws of India.
  - The proceedings of Arbitration shall be in Hindi/English language.
- Except as otherwise provided elsewhere in the contract if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof the same shall be referred to a Tribunal of three (3) Arbitrators, constituted as per the terms of and under the (Indian) Arbitration and Conciliation Act, 1996. Each party to the contract shall appoint/nominate one Arbitrator each, the two Arbitrators so appointed/nominated by the Parties herein shall together choose the third Arbitrator, who shall be the Presiding Arbitrator of the Tribunal. The consortium of the three Arbitrators shall form the Arbitral Tribunal.
- In case, a party fails to appoint an arbitrator within 30 days from the receipt of the request to do so by the other party or the two Arbitrators so appointed fail to agree on the appointment of third Arbitrator within 30 days from the date of their appointment upon request of a party, the Chief Justice of the Gujarat High Court or any person or institution designated by him shall appoint the Arbitrator/Presiding Arbitrator upon request of one of the parties.
- Any letter, notice or other communications dispatched to SELECTED BIDDER relating to either arbitration proceeding or otherwise whether through the post or through a representative on the address last notified to the Authority by SELECTED BIDDER shall be deemed to have been received by SELECTED BIDDER although returned with the remarks, refused 'undelivered' where about not known or words to that effect or for any other reasons whatsoever
- If the Arbitrator so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the Authority to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
- It is a term of the contract that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.
- It is also a term of the contract that neither party to the contract shall be entitled for any interest on the amount of the award.
- The Arbitrator shall give reasoned award and the same shall be final, conclusive and binding on the parties.
- The fees of the arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the parties.

8.25 Conflict Resolution

SELECTED BIDDER shall disclose to the Authority in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for SELECTED BIDDER or SELECTED BIDDER's Team) in the course of performing the Services as soon as practical after it becomes aware of that conflict.

8.26 Publicity

SELECTED BIDDER shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Authority first gives SELECTED BIDDER its written consent.

8.27 Force Majeure

Force Majeure shall not include any events caused due to acts/omissions of SELECTED BIDDER resulting in a breach/contravention of any of the terms of the Contract and/or SELECTED BIDDER's Bid. It shall also not include any default on the part of SELECTED BIDDER due to its negligence or failure to implement the stipulated/proposed precautions, as were required to be taken under the Contract.

The failure or occurrence of a delay in performance of any of the obligations of either party shall constitute a Force Majeure event only where such failure or delay could not have reasonably been foreseen i.e. war, or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, Vandalism(due to Law &

Order situation), Terrorism, explosions, epidemics, quarantine restriction, strikes, lockouts or act of God (hereinafter referred to as events) , or where despite the presence of adequate and stipulated safeguards the failure to perform obligations has occurred at any location in scope. In such an event, the affected party shall inform the other party in writing within five days of the occurrence of such event. Any failure or lapse on the part of SELECTED BIDDER in performing any obligation as is necessary and proper, to negate the damage due to projected force majeure events or to mitigate the damage that may be caused due to the above mentioned events or the failure to provide adequate disaster management/recovery or any failure in setting up a contingency mechanism would not constitute force majeure, as set out above.

In case of a Force Majeure, all Parties shall endeavor to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure.

8.28 Delivery

SELECTED BIDDER shall bear the cost for packing, transport, insurance, storage and delivery of all the goods for "Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited" at all locations identified by the Authority in Gandhinagar.

The Goods and manpower supplied under this Contract shall conform to the standards mentioned in the RFP, and, when no applicable standard is mentioned, to the authoritative standards; such standard shall be approved by Authority.

SELECTED BIDDER shall only procure the hardware and software after approvals from a designated Committee/Authority.

8.29 Insurance

- The Goods supplied under this Contract/all components under O&M shall be comprehensively insured by SELECTED BIDDER at his own cost, against any loss or damage, for the entire period of the contract. SELECTED BIDDER shall submit to the Authority, documentary evidence issued by the insurance company, indicating that such insurance has been taken.
- SELECTED BIDDER shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the goods and also 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 SELECTED BIDDER.
- SELECTED BIDDER shall take out and maintain at its own cost, on terms and conditions approved by the Authority, insurance against the risks, and for the coverage's, as specified below;
    - At the Authority's request, shall provide evidence to the Authority showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.
    - Employer's liability and workers' compensation insurance in respect of the Personnel of the Company, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate

8.30 Transfer of Ownership

SELECTED BIDDER must transfer all titles to the assets and goods procured for the purpose of the project to the Authority at the time of Acceptance of System. This includes all licenses, titles, source code, certificates, hardware, devices, equipment's etc. related to the system designed, developed, installed and maintained by SELECTED BIDDER. SELECTED BIDDER is expected to provide source code, transfer IPR and ownership right of only those solutions which would be customized by bidder for the use of

Gandhinagar Smart City Development Limited. For any pre-existing work, SELECTED BIDDER and Gandhinagar Smart City Development Limited shall be held jointly responsible and its use in any other project by SELECTED BIDDER shall be decided on mutual consent.

Forthwith upon expiry or earlier termination of the Contract and at any other time on demand by the Authority, SELECTED BIDDER shall deliver to the Authority all Documents provided by or originating from the Authority and all Documents produced by or from or for SELECTED BIDDER in the course of performing the Services, unless otherwise directed in writing by the Authority at no additional cost. SELECTED BIDDER shall not, without the prior written consent of the Authority store, copy, distribute or retain any such Documents.

8.31 Exit Management Plan

- An Exit Management plan shall be furnished by SELECTED BIDDER in writing to the Authority within 90 days from the date of signing the Contract, which shall deal with at least the following aspects of exit management in relation to the contract as a whole and in relation to the Project Implementation, and Service Level monitoring.

    - A detailed program of the transfer process that could be used in conjunction with a Replacement Service Provider including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;
    - Plans for provision of contingent support to Project and Replacement Service Provider for a reasonable period after transfer.
    - Exit Management plan in case of normal termination of Contract period
    - Exit Management plan in case of any eventuality due to which Project is terminated before the contract period.
    - Exit Management plan in case of termination of SELECTED BIDDER

- Exit Management plan at the minimum adhere to the following:

    - Three (3) months of the support to Replacement Service Provider post termination of the Contract
    - Complete handover of the Planning documents, bill of materials, functional requirements specification, technical specifications of all equipment, change requests if any, sources codes, wherever applicable, reports, documents and other relevant items to the Replacement Service Provider/Authority
    - Certificate of Acceptance from authorized representative of Replacement Service Provider issued to SELECTED BIDDER on successful completion of handover and knowledge transfer

- In the event of termination or expiry of the contract, Project Implementation, or Service Level monitoring, both Bidder and Authority shall comply with the Exit Management Plan.
- During the exit management period, SELECTED BIDDER shall use its best efforts to deliver the services.

9. Special Conditions of Contract

9.1 Performance Security

The SELECTED BIDDER shall submit performance guarantee which is unconditional & irrevocable equal to 10% of the order value of the contract in the format prescribed in RFP issued by any of the Nationalized Banks Only. The performance guarantee shall be valid for the term agreement & shall be renewed & maintained by the SELECTED BIDDER for the term of the agreement & extension, if any. The performance guarantee shall be forfeited / liquidated by the GSCDL as a penalty in the event of failure to complete obligations or breach of any of the conditions by the SELECTED BIDDER.

9.2 Liquidated Damages

- If SELECTED BIDDER fails to adhere to SLAs as defined in the RFP, then penalty will be levied as defined under the SLA.
- The overall deduction shall not in any case exceed 10 % of the contract value. The penalties levied under any quarterly invoice submitted by Selected Bidder (based on SLA calculation) will be capped at 10% of the quarterly invoice value.
- The Authority may without prejudice to its right to effect recovery by any other method, deduct the amount of liquidated damages from any money belonging to SELECTED BIDDER in its hands (which includes the Authority's right to claim such amount against SELECTED BIDDER's Bank Guarantee) or which may become due to SELECTED BIDDER. Any such recovery or liquidated damages shall not in any way relieve SELECTED BIDDER from any of its obligations to complete the Work or from any other obligations and liabilities under the Contract.
- Delay not attributable to SELECTED BIDDER shall be considered for exclusion for the purpose of computing liquidated damages.

9.3 Limitation of Liability:

- Limitation of Bidder's Liability towards the Authority:
    - Neither Party shall be liable to the other Party for any indirect or consequential loss or damage (including loss of revenue and profits) arising out of or relating to the Contract.
    - Except in case of gross negligence or willful misconduct on the part of SELECTED BIDDER or on the part of any person or company acting on behalf of SELECTED BIDDER in carrying out the Services,

- SELECTED BIDDER, with respect to damage caused by SELECTED BIDDER to Authority's property, shall not be liable to Authority:
    - For any indirect or consequential loss or damage; and
    - For any direct loss or damage that exceeds the total payments payable under the Contract to SELECTED BIDDER hereunder,

- This limitation of liability shall not affect SELECTED BIDDER liability, if any, for damage to Third Parties caused by SELECTED BIDDER or any person or company acting on behalf of SELECTED BIDDER in carrying out the Services.

9.4 Ownership and Retention of Documents

- The Authority shall own the Documents, prepared by or for SELECTED BIDDER arising out of or in connection with the Contract.
- Forthwith upon expiry or earlier termination of this Contract and at any other time on demand by the Authority, SELECTED BIDDER shall deliver to the Authority all documents provided by or originating from the Authority and all documents produced by or for SELECTED BIDDER in the course of performing the Services, unless otherwise directed in writing by the Authority at no additional cost. SELECTED BIDDER shall not, without the prior written consent of the Authority store, copy, distribute or retain any such documents.

9.5 Information Security

- SELECTED BIDDER shall not carry any written/printed document, layout diagrams, CD, hard disk, storage tapes, other storage devices or any other goods/material proprietary to Authority into/out of any location without written permission from the Authority.

- SELECTED BIDDER shall not destroy any unwanted documents, defective tapes/media present at any location on their own. All such documents, tapes/media shall be handed over to the Authority.
- All documentation and media at any location shall be properly identified, labeled and numbered by SELECTED BIDDER. SELECTED BIDDER shall keep track of all such items and provide a summary report of these items to the Authority whenever asked for.
- Access to Authority's data and systems, Internet facility by SELECTED BIDDER at any location shall be in accordance with the written permission by the Authority. The Authority shall allow SELECTED BIDDER to use facility in a limited manner subject to availability. It is the responsibility of SELECTED BIDDER to prepare and equip himself in order to meet the requirements.
- SELECTED BIDDER must acknowledge that Authority's business data and other Authority proprietary information or materials, whether developed by Authority or being used by Authority pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to Authority; and SELECTED BIDDER along with its team agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than that used by SELECTED BIDDER to protect its own proprietary information. SELECTED BIDDER recognizes that the goodwill of Authority depends, among other things, upon SELECTED BIDDER keeping such proprietary information confidential and that unauthorized disclosure of the same by SELECTED BIDDER or its team could damage the goodwill of Authority, and that by reason of SELECTED BIDDER's duties hereunder. SELECTED BIDDER may come into possession of such proprietary information, even though SELECTED BIDDER does not take any direct part in or furnish the services performed for the creation of said proprietary information and shall limit access thereto to employees with a need to such access to perform the services required by this agreement. SELECTED BIDDER shall use such information only for the purpose of performing the said services.
- SELECTED BIDDER shall, upon termination of this agreement for any reason, or upon demand by Authority, whichever is earliest, return any and all information provided to SELECTED BIDDER by Authority, including any copies or reproductions, both hardcopy and electronic.
- By virtue of the Contract, SELECTED BIDDER team may have access to personal information of the Authority and/or a third party. The Authority has the sole ownership of and the right to use, all such data in perpetuity including any data or other information pertaining to the citizens that may be in the possession of SELECTED BIDDER team in the course of performing the Services under the Contract

9.6 Records of contract documents

- SELECTED BIDDER shall at all-time make and keep sufficient copies of the process manuals, operating procedures, specifications, Contract documents and any other documentation for him to fulfil his duties under the Contract.
- SELECTED BIDDER shall keep on the Site at least three copies of each and every specification and Contract Document, in excess of his own requirement and those copies shall be available at all times for use by the Authority's Representative and by any other person authorized by the Authority's Representative.

9.7 Security and Safety

SELECTED BIDDER shall comply with the directions issued from time to time by the Authority and the standards related to the security and safety, in so far as it applies to the provision of the Services.

SELECTED BIDDER shall upon reasonable request by the Authority, or its nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.

9.8 Confidentiality

- SELECTED BIDDER shall not, either during the term or after expiration of this Contract, disclose any proprietary or confidential information relating to the Services/Contract and/or Authority's business/operations, information, Application/software, hardware, business data, architecture schematics, designs, storage media and other information/documents without the prior written consent of the Authority.
- The Authority reserves the right to adopt legal proceedings, civil or criminal, against SELECTED BIDDER in relation to a dispute arising out of breach of obligation by SELECTED BIDDER under this clause.
- SELECTED BIDDER shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidentiality agreement with the Authority to the satisfaction of the Authority.
- SELECTED BIDDER shall notify the Authority promptly if it is aware of any disclosure of the Confidential Information otherwise than as permitted by the Contract or with the authority of the Authority.
- SELECTED BIDDER shall be liable to fully recompense the Authority for any loss of revenue arising from breach of confidentiality.

9.9 Events of Default by Selected Bidder

- The failure on the part of SELECTED BIDDER to perform any of its obligations or comply with any of the terms of this Contract shall constitute an Event of Default on the part of SELECTED BIDDER. The events of default are but not limited to:
  - SELECTED BIDDER/Bidder's Team has failed to perform any instructions or directives issued by the Authority which it deems proper and necessary to execute the scope of work or provide services under the Contract, or
  - SELECTED BIDDER/Bidder's Team has failed to confirm/adhere to any of the key performance indicators as laid down in the Key Performance Measures/Service Levels, or if SELECTED BIDDER has fallen short of matching such standards/benchmarks/targets as the Authority may have designated with respect to the system or any goods, task or service, necessary for the execution of the scope of work and performance of services under this Contract. The above mentioned failure on the part of SELECTED BIDDER may be in terms of failure to adhere to performance, quality, timelines, specifications, requirements or any other criteria as defined by the Authority;
  - SELECTED BIDDER has failed to remedy a defect or failure to perform its obligations in accordance with the specifications issued by the Authority, despite being served with a default notice which laid down the specific deviance on the part of SELECTED BIDDER/SELECTED BIDDER's Team to comply with any stipulations or standards as laid down by the Authority; or
  - SELECTED BIDDER/SELECTED BIDDER's Team has failed to adhere to any amended direction, instruction, modification or clarification as issued by the Authority during the term of this Contract and which the Authority deems proper and necessary for the execution of the scope of work under this Contract.
  - SELECTED BIDDER/SELECTED BIDDER's Team 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 Bid, the RFP and this Contract.
  - There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to SELECTED BIDDER.
  - SELECTED BIDDER/Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.
- Where there has been an occurrence of such defaults inter alia as stated above, the Authority shall issue a notice of default to SELECTED BIDDER, setting out specific defaults / deviances / omissions / non-compliances / non-performances and providing a notice of thirty (30) days to enable such defaulting party to remedy the default committed.

- Where despite the issuance of a default notice to SELECTED BIDDER by the Authority, SELECTED BIDDER fails to remedy the default to the satisfaction of the Authority, the Authority may, where it deems fit, issue to the defaulting party another default notice or proceed to contract termination.

9.10 Termination

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

- Where the Authority is of the opinion that there has been such Event of Default on the part of SELECTED BIDDER/SELECTED BIDDER's Team which would make it proper and necessary to terminate this Contract and may include failure on the part of 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.
- Where it comes to the Authority's attention that SELECTED BIDDER (or SELECTED BIDDER's Team) is in a position of actual conflict of interest with the interests of the Authority, in relation to any of terms of SELECTED BIDDER's Bid, the RFP or this Contract.
- Where 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 SELECTED BIDDER, any failure by SELECTED BIDDER to pay any of its dues to its creditors, the institution of any winding up proceedings against SELECTED BIDDER or the happening of any such events that are adverse to the commercial viability of SELECTED BIDDER. In the event of the happening of any events of the above nature, the Authority shall reserve the right to take any steps as are necessary, to ensure the effective transition of the sites pilot site to a successor agency, and to ensure business continuity.
- Termination for Insolvency: The Authority may at any time terminate the Contract by giving written notice to SELECTED BIDDER, without compensation to SELECTED BIDDER, if 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 Authority.
- SELECTED BIDDER may, subject to approval by the Authority, terminate this Contract before the expiry of the term by giving the Authority a prior and written notice at least 3 months in advance indicating its intention to terminate the Contract.
- In case of deliverables/ milestone which is approved by GSCDL and payment is undisputed, the SELECTED BIDDER may terminate this contract in case of non-payment after 90 days of serving the notice to GSCDL.

9.11 Consequence of Termination

- In the event of termination of the Contract due to any cause whatsoever, whether consequent to the stipulated Term of the Contract or otherwise the Authority shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the project which SELECTED BIDDER shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow and provide all such assistance to the Authority and/or the successor agency/service provider, as may be required, to take over the obligations of SELECTED BIDDER in relation to the execution/continued execution of the requirements of the Contract.
- Where the termination of the Contract is prior to its stipulated term on account of a Default on the part of SELECTED BIDDER or due to the fact that the survival of SELECTED BIDDER as an independent corporate entity is threatened/has ceased, or for any other reason, whatsoever, the Authority, through unilateral re-determination of the consideration payable to SELECTED BIDDER, shall pay SELECTED BIDDER for that part of the Services which have been authorized by the Authority and satisfactorily performed by SELECTED BIDDER up to the date of

termination. Without prejudice to any other rights, the Authority may retain such amounts from the payment due and payable by the Authority to SELECTED BIDDER as may be required to offset any losses caused to the Authority as a result of any act/omissions of SELECTED BIDDER. In case of any loss or damage due to default on the part of SELECTED BIDDER in performing any of its obligations with regard to executing the Schedule of Requirements under the contract, SELECTED BIDDER shall compensate the Authority for any such loss, damages or other costs, incurred by the Authority. Additionally, members of its team shall perform all its obligations and responsibilities under the Contract in an identical manner as were being performed before the collapse of 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 Authority and as may be proper and necessary to execute the Schedule of Requirements under the Contract in terms of SELECTED BIDDER's Bid, the Bid Document and the Contract

- Nothing herein shall restrict the right of the Authority to invoke the Bank Guarantee and other Guarantees furnished hereunder and pursue such other rights and/or remedies that may be available to the Authority under law.
- The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

9.12 Change Control Note

- This applies to and describes the procedure to be followed in the event of any proposed change to contract, site Implementation, and Service levels. Such change shall include, but shall not be limited to, changes in the scope of services provided by SELECTED BIDDER and changes to the terms of payment.
- Change requests in respect of the contract, the site implementation, or the Service levels shall emanate from the Parties' representative who shall be responsible for obtaining approval for the change and who shall act as its sponsor throughout the Change Control Process and shall complete Part A of the CCN (Annex I, Section 3 of the RFP). CCNs shall be presented to the other Party's representative who shall acknowledge receipt by signature of the authorized representative of the Authority.
- SELECTED BIDDER and the Authority while preparing the CCN, shall consider the change in the context of whether the change is beyond the scope of Services including ancillary and concomitant services required. The CCN shall be applicable for the items which are beyond the stated/implied scope of work as per the RFP document.
- SELECTED BIDDER shall assess the CCN and complete Part B of the CCN. In completing Part B of the CCN SELECTED BIDDER/Lead Bidder shall provide as a minimum:
    - a description of the change;
    - a list of deliverables required for implementing the change;
    - a timetable for implementation;
    - an estimate of any proposed change; o any relevant acceptance criteria;
    - an assessment of the value of the proposed change;
    - Material evidence to prove that the proposed change is not already covered within the scope of the RFP, Agreement and Service Levels.
- Prior to submission of the completed CCN to the Authority or its nominated agencies, SELECTED BIDDER shall undertake its own internal review of the proposal and obtain all necessary internal approvals. As a part of this internal review process, SELECTED BIDDER shall consider the materiality of the proposed change in the context of the Agreement, the sites, Service levels affected by the change and the total effect that may arise from implementation of the change.
- Each Party shall be responsible for its own costs incurred in the quotation, preparation of CCNs and in the completion of its obligations described in this process provided SELECTED BIDDER meets the obligations as set in the CCN. In the event SELECTED BIDDER is unable to meet the obligations as defined in the CCN then the cost of getting it done by third party shall be borne by SELECTED BIDDER. Change requests and CCNs shall be reported monthly to each Party's representative who shall prioritize and review progress.

10. Service Levels

10.1 Purpose

The purpose is to define the levels of service provided by SELECTED BIDDER to the Authority for the duration of the contract. The benefits of this are:

- Start a process that applies to Authority and SELECTED BIDDER attention to some aspect of performance, only when that aspect drops below the threshold defined by the Authority.
- Help the Authority control the levels and performance of SELECTED BIDDER's services.
- The Service Levels are between the Authority and SELECTED BIDDER.

10.2 Service Level Agreements & Targets

- This section is agreed to by Authority and SELECTED BIDDER as the key performance indicator for the project. This may be reviewed and revised according to the procedures detailed in Service Level Change Control.
- The following section reflects the measurements to be used to track and report system's performance on a regular basis. The targets shown in the following tables are for the period of contact.
- The procedures in Service Level Change Control shall be used if there is a dispute between Authority and SELECTED BIDDER on what the permanent targets should be.

10.3 General Principles of Service level Agreements

The Service Level agreements have been logically segregated in the following categories:

10.3.1 Service Level Agreements

- Service Level Agreement (SLA) shall become the part of contract between GSCDL and the successful bidder. SLA defines the terms of the successful bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section.
- The successful bidder has to comply with service level requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this contract i.e. for a period of 2 years of Operation and Maintenance. The successful bidder has to supply appropriate software/hardware/automated tools as may be required to monitor and submit reports of all the SLAs mentioned in this section.
- For purposes of the SLA, the definitions and terms as specified in the document along with the following terms shall have the meanings set forth below:
    - "Total Time" - Total number of hours in the quarter (or the concerned period) being considered for evaluation of SLA performance.
    - "Uptime" – Time period for which the specified services/outcomes are available in the period being considered for evaluation of SLA. Formulae for calculation of Uptime: Uptime (%) = {1-[(Downtime)/(Total time scheduled maintenance time)]}*100
    - "Downtime"- Time period for which the specified services/components/outcomes are not available in the concerned period, being considered for evaluation of SLA, which would exclude downtime owing to Force Majeure & Reasons beyond control of the successful bidder.
    - "Scheduled Maintenance Time" - Time period for which the specified services/components with specified technical and service standards are not available due to scheduled maintenance activity. The successful bidder is required to take at least 10 days prior approval from GSCDL for any such activity. The scheduled maintenance should be carried out during non-peak hours (like post mid-night, and should not be for more than 4 hours. Such planned downtime would be granted max 4 times a year.

- "Incident" - Any event/abnormalities in the service being rendered, that may lead to disruption in normal operations and services to the end user.
- "Response Time" - Time elapsed from the moment an incident is reported in the Helpdesk over phone or by any applicable mode of communication, to the time when a resource is assigned for the resolution of the same.
- "Resolution Time" - Time elapsed from the moment incident is reported to Helpdesk either in person or automatically through system, to the time by which the incident is resolved completely and services as promised are restored.

10.3.2 Measurement of SLAs

The SLA metrics provided specifies performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on quarterly basis. The SLA also specifies the liquidated damages for lower performance and breach conditions.

Payment to the SELECTED BIDDER is linked to the compliance with the SLA metrics. The matrix specifies three levels of performance, namely,

- The SELECTED BIDDER will get 100% of the Contracted value if all the baseline performance metrics are compiled and the cumulative credit points are 100%
- The SELECTED BIDDER will get lesser payment in case of the lower performance. (For e.g. if SLA point score is 80 then the SELECTED BIDDER will get 20% less on the quarterly payment – The formula calculating the deductions is "(100 – SLA Point Score)%")
- If the performance of the Agency in respect of any parameter falls below the prescribed lower performance limit, debit points are imposed for the breach.
- The credit (+) points earned during the quarter will be considered for computing penalty. The quarterly payment shall be made after deducting the liquidated damages as mentioned above.
- The aforementioned SLA parameters shall be measured as per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SELECTED BIDDER and approved and audited by GSCDL or its appointed Consultant for accuracy and reliability.
- GSCDL shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters. The SLAs defined, shall be reviewed by GSCDL on an bi-annual basis after consulting the SELECTED BIDDER, Project Management Consultants and other experts. All the changes would be made by GSCDL after consultation with the SELECTED BIDDER and might include some corrections to reduce undue relaxation in Service levels or some corrections to avoid unrealistic imposition of liquidated damages, which are noticed.
- Total penalty to be levied on the SELECTED BIDDER shall be capped at 10% of the total contract value. However, GSCDL would have right to invoke termination of the contract in case the overall liquidated damages equals 10% of total contract value.
- The overall deduction shall not in any case exceed 10 % of the contract value. The penalties levied under any quarterly invoice submitted by Selected Bidder (based on SLA calculation) will be capped at 10% of the quarterly invoice value. GSCDL would also have right to invoke termination of contract in case penalty is levied at 10% for 2 successive quarters.

10.3.3 SLAs applicable under this project

- These SLAs shall be used to evaluate the performance of the services on monthly basis.
- Penalty levied for non- performance as per SLA requirements shall be deducted through subsequent payments due from GSCDL or through the Performance Bank Guarantee.
- The SLA parameters shall be measured for each of the sub systems' SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools. All such required tools should be provided by the successful bidder. GSCDL will have the authority to audit these tools for accuracy and reliability.

- The upper limit of penalty would be capped at 10% of the opex value for each quarter. In case the calculated penalty crosses 10% penalty of the opex value in 2 subsequent quarters, GSCDL reserves the right to invoke the termination clause.
- SLA Matrix is provided in **Annexure 20**

10.3.4 Conditions for No Penalties

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

- There is a force majeure event effecting the SLA which is beyond the control of the successful bidder. Force Majeure events shall be considered in line with the clause mentioned RFP.
- The non-compliance to the SLA has been due
- To reasons beyond the control of the successful bidder. Decision of the authority with regards to incidents beyond the control of the successful bidder will be final
- Theft cases by default/vandalism would not be considered as "beyond the control of bidder". Hence, the Bidder should be taking adequate anti-theft measures, spares strategy, Insurance as required to maintain the desired Required SLA.
- In case of any component damage due to external hits, accidents etc. the replacement/repair will be under the scope of bidder. No cost will be borne/shared by the authority. Successful bidder is expected to have insurance cover for all components.
- It is also made clear that incidents like cable cuts caused due to any third party interventions, no exceptions in downtime will be considered by the authority and applicable penalty will be levied.

10.4 Reporting Procedures

- SELECTED BIDDER representative shall prepare and distribute Service level performance reports in a mutually agreed format by the 5th working day of subsequent month. The reports shall include "actual versus target" Service Level Performance, a variance analysis and discussion of appropriate issues or significant events. Performance reports shall be distributed to Authority management personnel as directed by Authority.
- Preventive maintenance conducted during the month must also be sent with logs. Complete inventory with location wise components/subcomponents along with Lat long, updated serial numbers, make, model, firmware details, country of origin, application details, license details etc. to be provided
- Any report required by the authority from time to time related to the project must be provided (in hard copy and soft copy as required)
- Selected Bidder must also conduct trainings related to components, applications, software etc. for stakeholders
- Also, SELECTED BIDDER may be required to get the Service Level performance report audited by a third-party Auditor appointed by the Authority.

10.5 Issue Management Procedures

10.5.1 General

- This process provides an appropriate management structure for the orderly consideration and resolution of business and operational issues in the event that quick consensus is not reached between Authority and Bidder.
- Implementing such a process at the beginning of the outsourcing engagement significantly improves the probability of successful issue resolution. It is expected that this pre-defined process shall only be used on an exception basis if issues are not resolved at lower management levels.

10.5.2 Issue Management Process

Either Authority or SELECTED BIDDER may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of disagreement with possible solutions.

Any unresolved issues/disputes concerning the Project/Contract between the Parties shall first be referred in writing to the Project Manager for his consideration and resolution. If the Project Manager is unable to resolve any issue/dispute within 5 days of reference to them, the Project Manager shall refer the matter to the Program Management Committee. If the Program Management Committee is unable to resolve the issues/disputes referred to them within 15 days the unresolved issue/dispute shall be referred to Steering Committee/high powered committee/Project Implementation Committee for resolution. The Steering Committee within 30 days of reference to them shall try to resolve the issue/dispute.
If the Steering Committee fails to resolve a dispute as per the above clause, the same shall be referred to arbitration. The arbitration proceedings shall be carried out as per the Arbitration procedures mentioned in Clause 8.2.4 of this section of RFP.

10.5.3 Service Level Change Control

10.5.3.1 General

- It is acknowledged that this Service levels may change as Authority's business needs evolve over the course of the contract period. As such, this document also defines the following management procedures:
    - A process for negotiating changes to the Service Levels
    - An issue management process for documenting and resolving particularly difficult issues.
    - Authority and Bidder management escalation process to be used in the event that an issue is not being resolved in a timely manner by the lowest possible level of management.
- Any changes to the levels of service provided during the term of this Agreement shall be requested, documented and negotiated in good faith by both parties.
- Either party can request a change.
- Service Level Change Process: The parties may amend Service Level by mutual agreement in accordance. Changes can be proposed by either party. Unresolved issues shall also be addressed. SELECTED BIDDER's representative shall maintain and distribute current copies of the Service Level document as directed by Authority.
- Additional copies of the current Service Levels shall be available at all times to authorized parties.
- Version Control/Release Management: All negotiated changes shall require changing the version control number. As appropriate, minor changes may be accumulated for periodic release or for release when a critical threshold of change has occurred.

11. Scope of work

This section describes only minimum requirements; bidders may propose a better or more optimized approach and methodology that meets the objectives specified in this RFP. Also, Bidders are advised to carry out their own assessment of requirement before submission of the response to this bid. Anything which is missing in this section but required for successful execution of the project (as per the defined SLAs) anytime in future shall be provided by the selected bidder without any additional cost to GSCDL.

The selected bidder shall be required to demonstrate continuous efforts towards the sustainability of the Integrated Command and Control Center (ICCC) for the entire duration of the contract. Bidder must ensure adoption and implementation of environmentally friendly practices, efficient resource utilization, and the pursuit of sustainable technological solutions among others. Additionally, the bidder is obligated to strictly adhere to GSCDL's ICCC business plan, Operations Manual and other guidelines floated by CERT-IN, STQC, Govt of Gujarat Guidelines and Govt. of India guidelines. All strategic, operational, technological and financial aspects of guidelines must be followed. Any deviations to existing guidelines must be approved by GSCDL. Regular reporting and updates related to the project must form an integral part of bidder's governance process.

GSCDL has undertaken deployment of following components for which O&M services are required as outlined in this RFP. Following details are broad based and details of the same are provided in the RFP. In case of anything missing in this section but required for successful execution of the project (as per the defined SLAs) anytime in future, it will be the responsibility of the selected bidder to ensure the details are taken from existing MSI:

Sr No	Details	O&M Coverage	Remarks
1	GIS	Under GMC area	GSCDL has implemented the GIS project to achieve effective output and benefits from the E-Governance implementation for all the services of the ULBs, for efficient decision making by government officials and related government employees with the support of spatial mapping and data analysis features, accurate data collection, storage, update and use for GSCDL and the citizens of Gandhinagar
2	Adaptive Traffic Control System	21 junctions in Gandhinagar city	Operation and monitoring of the ATCS junctions (in collaboration with Police Department) is done through a native application at the ICCC which is integrated with a centralized ICCC Dashboard application. All ATCS Junctions have an ATCS controller The traffic enforcement data is stored for 365 days on Primary Server at main ICCC and for 365 days at Secondary Server at Main ICCC. Flagged data is stored for 4 years.
3	Traffic Enforcement System (RLVD/ANPR/SVD)	16 junctions in Gandhinagar city	Operation and monitoring of the TES is done through a native application at the ICCC which is integrated with a centralized ICCC Dashboard application. The traffic enforcement data is stored at Local Processing Unit (LPU) for 7 days, for 7 days on Primary Server at main ICCC and for 30 days at Secondary Server at Main ICCC. Flagged data is stored for 365 days. RLVD cameras are onboarded onto VMS system for providing video related to

Sr No	Details	O&M Coverage	Remarks
			violations Application hosted at Cloud DC will access traffic violation data from ICCC
4	Smart Poles	40 locations in Gandhinagar City	Each Smart Pole consists of Panic Button, Environment Sensor, PTZ camera, Smart Street Light, WiFi AP, Variable Messaging Signboard. All Smart Poles have a separate junction box Operations and Monitoring is done through a native application which is integrated with the ICCC centralized dashboard
5	Intelligent Transport Management System	35 buses in Gandhinagar city	ITMS is an integrated system installed on the bus to deliver primarily services pertaining to location tracking, operating parameters like speed, direction etc. The system shall be connected to central control center via wireless communication system provided using GSM /GPRS / 3G system. Operations and Monitoring is done through a native application which is integrated with the ICCC centralized dashboard
6	Solid Waste Management	More than 5000 PoIs across Gandhinagar	Monitoring and tracking of more than 5000 PoIs across Gandhinagar city for Door to Door waste collection through GPS GPS devices installed in vehicles. Separate Native Application is used for the same. Also a weighbridge data controller is available which transmits data online
7	General Surveillance	Cameras at 98 locations in the city and 12 inside ICCC	All cameras used for General Surveillance are integrated onto VMS system Operations and Monitoring is done through VMS application which is integrated with the ICCC centralized dashboard

Sr No	Details	O&M Coverage	Remarks
8	Software and licenses	1. ATCS and TES System 2. ITMS 3. SWM 4. Smart Pole 5. VMSB 6. ECB 7. PA 8. ICCC City Operations 9. Contact Center Application 10. Enterprise Management System 11. Anti Virus 12. Any other server side Software required to cater Functional, Technical and SLA requirements	Software and licenses are in the name of GSCDL. Applications are hosted on cloud / physical servers.
9	Variable Messaging Signboards	10 VMSBs in Gandhinagar city	Ensuring maximum citizen outreach Display of various citizen centric schemes of Central Government and State Government Display of Health Advisories Display of traffic related information in case of VIP movement Operations and Monitoring is done through a native application which is integrated with the ICCC centralized dashboard
10	Public Address System	13 Public Address in Gandhinagar city	Citizen outreach can be ensured by making public interest announcements Operations and Monitoring is done through a native application which is integrated with the ICCC centralized dashboard
11	Emergency Call boxes	13 ECBs in Gandhinagar city	Citizens can speak to ICCC control room in case of any emergency Operations and Monitoring is done through a native application which is integrated with the ICCC centralized dashboard
12	Access Control	ICCC and Server Room	Allowing entry and exit to and from the premises to authorized personnel only using biometrics technology.

Operations and maintenance services are broadly categorized as follows:

11.1 Project Management & Facilities Management Services

11.2 The SELECTED BIDDER will be required to provide facilities management services to support the GSCDL officials in performing their day-to-day functions related to this system. SELECTED BIDDER is required to depute a dedicated, centralised project management and technical team for the overall project management and interaction with GSCDL.

- Selected Bidder will be solely responsible for ICCC operations and support i.e. operations, maintenance and management of all IT and non-IT components and shall ensure 24 x 7 x 365 operations, maintenance and support for the overall premises
- The Selected Bidder shall maintain the ICCC premises in line with minimum requirements as per the industry best practices

11.3 Provision of the Operational Manpower to view the feeds at Command Center

The SELECTED BIDDER is required to provide suitable manpower to monitor the data feeds at command center and support GSCDL, Traffic Police Department and any other smart solutions in operationalization of the project. The exact role of these personnel and their responsibilities would be defined and monitored by GSCDL and respective departmental personnel. SELECTED BIDDER shall be required to provide such manpower meeting following requirements:

- All such manpower shall be minimum graduate pass
- All such manpower shall be without any criminal background / record.
- GSCDL reserves the right to carry out background check of the personnel proposed on the
- Project for verification of criminal record, at the beginning of deployment or during deployment.
- SELECTED BIDDER shall have to replace any person, if not found suitable for the job.
- All the manpower shall have to undergo training from the SELECTED BIDDER for at least 15 working days on the working of project. Training should also cover dos & don'ts and will have few sessions from GSCDL and Traffic Police Department officers on right approaches for monitoring the feeds & providing feedback to GSCDL, Traffic Police Personnel and other associated government agencies.
- Each person shall have to undergo compulsory 1 day training every month
- Operational Manpower shall work in 3 shifts, with no person being made to see the feeds for more than 8 hours at a stretch.

Detail operational guideline document shall be prepared and submitted to GSCDL which shall specify detail responsibilities of these resources and their do's & don'ts.

11.4 Basic Infrastructure Services

Following services shall be provided by the SELECTED BIDDER under the basic infrastructure services:

- Ensure availability of the infrastructure (both IT & Non IT) including but not limited to Power, Cooling, Racks, Storage and other peripheral equipment installed at the time of Project commissioning as per the SLAs.
- Proactive and reactive maintenance, repair and replacement of defective components (all IT and Non IT devices and infrastructure) installed under the Project. The cost for repair and replacement shall be borne by the SELECTED BIDDER.
- Any component (IT and Non IT) that is reported to be faulty / non-functional on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame agreed upon in the Service Level Agreement (SLA). The faulty / non functional devices (IT and Non IT) must be replaced with a new device of similar or higher

specification at no cost to GSCDL. Necessary integration with the concerned application / software will be selected bidder's responsibility and cost will be borne by selected bidder.

- Proactive and reactive maintenance, repair and replacement of defective components (IT and Non-IT/ Hardware and Software). The cost for repair and replacement shall be borne by the selected bidder.
- SELECTED BIDDER shall maintain records of the maintenance of the basic infrastructure and shall maintain a logbook on-site that may be inspected by the GSCDL and Traffic Police at any time.
- The Selected Bidder shall be responsible for Electricity and Diesel Management for the entire project period. The Selected Bidder shall ensure that diesel shall be there in the DG sets all the time to maintain the SLA and ensure no downtime of ICCC. A register must be maintained for diesel consumption
- Record of power cuts at ICCC/all Field locations must be maintained and a log/report in this regard must be submitted whenever required by GSCDL.
- The Selected Bidder shall have to stock and provide adequate onsite and offsite spare parts and spare components to ensure that the SLA is met for the entire contract period. To provide this service it is important for the service provider to have necessary back-to-back arrangement with the respective OEMs / vendors. The selected bidder would have to provide a copy of the service level agreement signed with the respective OEMs in case asked by the client.
- Selected Bidder has to monitor physical access (biometric scan, access cards, video camera etc.)
- SLAs must be maintained as laid out in the RFP. No exceptions will be considered with regards to dependencies on third party / OEMs.

11.5 Network Monitoring /Management Services

The activities shall include:

- SELECTED BIDDER shall provide services for management of the said project to maintain performance at optimum levels on a 24 x 7 X 365 basis. SELECTED BIDDER shall monitor and administer the network.
- Ensure continuous operation and upkeep of the LAN & WAN infrastructure at the ICCC & Data Centre including all active and passive components
- Ensure coordination with concerned ISP (currently GTPL) for WAN link related issues and maintaining failure logs etc.
- Ensuring that the network is available 24x7x365
- Attending to and resolving ICCC & Data Center network failures and issues
- Analyze the network traffic behavior and logs on a daily basis and provide a detailed report in Monthly MIS
- Support and maintain the overall ICCC & Data Centre network infrastructure including but not limited to LAN passive components, WAN Switches, Switches, Firewalls etc.
- Configuration and backup of network devices/ equipment including documentation of all configurations
- 24x7x365 monitoring of the network to spot the problems immediately.
- Provide information on performance of capacity utilization of network devices installed in ICCC & Data Centre
- Attending to and resolving network failures and snags.
- Support and maintain the overall network infrastructure including but not limited to LAN passive components, routers, switches etc.
- Configuration and backup of network devices including documentation of all configurations
- Provide information on performance of Ethernet segments, including capacity utilization and error statistics for the segment and the top-contributing hosts, WAN links and routers

- SLAs must be maintained as laid out in the RFP. Delays in resolution of issues due to dependencies on ISPs end will not be considered as exceptions. No exceptions with regards to down time will be considered. The SELECTED BIDDER 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.
- SELECTED BIDDER shall carry out break fix maintenance of the LAN cabling or maintenance work requiring civil work.
- Looking at the scalability and future requirement the commercials proposed in price bid for given bandwidth of internet and leased circuits for current requirement, the same rates shall be applicable for the period of 2 years for any additional expansion requirement at new location or upgradation at connected locations.
- Orders can be released any time during the contract tenure depending upon the actual requirement of the GSCDL based on the Rates discovered in price bid.
- It has been observed that there is a considerable price reduction in cost of Domestic and Internet bandwidth during last few years. Hence, GSCDL will review the prices at end of every year and Service Provider is required to match the prevailing market prices as per TRAI regulations.
- GSCDL may request the selected bidder to make changes in the network (WAN/LAN). These requirements shall be termed as "Change Requests" and cost for these quantities shall be discovered as part of the commercial bid. The GSCDL shall issue "Change Requests" (CR) on need basis. Following scenarios can lead to "Change Requests" (CR) by GSCDL.

Scenario 1: New site

- This scenario will occur when GSCDL may intend to extend the network to a new site, which is not envisaged as of now. Following are the considerations in creation of a new site:
    - Number of users at the new site
    - Reinstallation at new site
    - Office type / site (outdoor/indoor) for the new site
    - Mode of last mile connectivity required/ feasible
    - Possibility of using devices from the hardware pool already available

Scenario 2: Closure of an existing site

- This scenario will occur when GSCDL intends to close of its existing sites/ offices. Following are considerations in closure of an existing site:
- GSCDL's credit in the operation and maintenance expenses of the site for the remaining duration of the contract from the closure of site.
- Possibility of use of hardware, which has ceased to be useful, in case scenario 1 arises in future.
- Recurring billing for the site shall end by 1 month of notice for closure during agreement period for any site.

Scenario 3: Change of bandwidth

This scenario will occur when GSCDL intends to increase or reduce the bandwidth available at a particular location. Following are the considerations to be taken care of in case of change in bandwidth.

- GSCDL's credit in the operation and maintenance expenses of the site for the remaining duration of the contract from the closure of site.
- Possibility of use of hardware, which has ceased to be useful, in case scenario 1 arises in future.
- Need to change CPE devices to support required in case of bandwidth upgradation without any addition cost for same.

Note:

- Bidder has to provide comprehensive O&M services maintain the street IT infrastructure, edge devices, civil infrastructure, network infrastructure, cabling and electrical infrastructure irrespective of whether the existing OEM provides support or not.
    - As an illustration, in case a Camera on field malfunctions or gets damaged then it will be selected bidder's responsibility to replace it at bidder's cost at no cost to GSCDL as per SLA terms and conditions. No exception in SLA will be granted in such cases.
    - As another illustration, in case there is an event of components down on account of cable cut or site components damaged due to accident, then bidder has to rectify the issue at bidder's cost (at no cost to GSCDL) as per SLA terms and conditions. No exceptions in SLA will be granted in such cases.

11.6 Vendor Management Services

- Selected Bidder must coordinate with all the vendors /OEMs for upkeep of all the equipment (including those whose AMC / warranty is not in the purview of the existing MSI) deployed under the project and shall liaison with various vendors/OEMs/Suppliers/Contractors for related works, equipment & Services.
- SELECTED BIDDER shall coordinate and follow-up with all the relevant vendors to ensure that the issues are resolved in accordance with the SLAs
- SELECTED BIDDER shall also ensure that unresolved issues are escalated to respective departments.
- SELECTED BIDDER shall maintain database of the various vendors with details like contact person, telephone nos., escalation matrix, response time and resolution time commitments etc.
- SELECTED BIDDER shall draw a consolidated quarterly SLA performance report across vendors for consideration of the GSCDL and Traffic Police.

11.7 Physical Infrastructure Management and Maintenance Services

All the devices in the Project as part of the physical infrastructure shall be centrally and remotely monitored and managed on a 24x7x365 basis. Industry leading infrastructure management solution should be deployed to facilitate monitoring and management of the infrastructure. The physical infrastructure management and maintenance services shall include:

- Proactive and reactive maintenance, repair and replacement of defective components (IT and Non-IT/ Hardware and Software). The cost for repair and replacement shall be borne by the SELECTED BIDDER.
- The SELECTED BIDDER 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. To provide this service it is important for the SELECTED BIDDER to have back-to-back arrangement with the OEMs. The SELECTED BIDDER needs to provide a copy of the service level agreement signed with the respective OEMs.
- Component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA). In case the SELECTED BIDDER fails to meet the above standards of maintenance, there will be a penalty as specified in the SLA.
- The SELECTED BIDDER shall also maintain records of all maintenance of the system and shall maintain a logbook on-site that may be inspected by the GSCDL.
- The Selected Bidder shall implement Pest Control & Anti Termite Treatment in coordination with GSCDL / GMC. Periodic pest control using Chemical spray shall be done once in 3 months as a contingency measure.

- Civil and Interior Work including (but not limited to) paint, cement concrete work, masonry work, storage, scaffolding work etc. is to be carried out by the Selected Bidder in case of requirement. The cost is to be borne by the selected bidder.
- The Selected Bidder's work shall include repair, replace and maintenance of all furniture chairs, tables items at the ICCC premises including other rooms associated with ICCC.
- Storage of all documents (which are done at ICCC premises) must be done properly.
- All alarms at the ICCC premises must be working at all times and repairs / maintenance / replacements must be done by selected bidder at their own cost.
- Selected Bidder may also be asked to prepare documents, Policy and SOP`s of all IT/NON IT Infrastructure
- Selected Bidder will be responsible for all electrical equipment's management & operations
- Various Preventive Maintenance activities should be done on a monthly basis, but not limited to (Cleaning, Battery drain test, Earth pit cleaning, DG Load test, Mock drill etc).
- Supervision of smooth operation of DG, UPS, Panels and all other critical equipment must be ensured by Selected Bidder
- Record of fuel usage must be maintained by Selected Bidder.
- Regular checking of all the lights, AC and other appliances must be done by Selected Bidder
- Selected Bidder must ensure sanitization, cleanliness and hygiene in and around ICCC premises. Record of cleanliness must be maintained. Replacement/refill of worn out / consumable items must be done by selected bidder.
- The SELECTED BIDDER shall be responsible to submit the electricity bill including connection charge, meter charge, recurring charges etc. to the electricity board directly for all applicable components. SELECTED BIDDER shall have to submit the challan of bill submission to GSCDL. GSCDL will reimburse the amount submitted to the SELECTED BIDDER after verification in next billing cycle.

11.8 Preventive Maintenance & Reactive Maintenance

- During the term of this agreement the bidder agrees to maintain the equipment in good working order and for this purpose will provide the following repair and maintenance service
- The bidder shall correct any faults and failures in the equipment and shall repair and replace worn or defective parts of the equipment during Client's normal working hours on all working days. In cases where unserviceable parts of the equipment need replacement the bidder shall replace such parts, at no extra cost to Client, with brand new parts or those equivalent to new parts in performance. The bidder shall further ensure that the equipment is not down at any time for want of spare parts.
- Failure in adhering to any of the terms and conditions mentioned in the scope of work will attract penalty clause.
- Report on preventive maintenance must be provided to authority with complete details on periodic basis along with logs and details of replacement

Preventive Maintenance and reactive maintenance includes carrying out the necessary repairs and replacement of parts wherever needed to keep the service & operation levels of the IT & non-IT equipment of ICCC in tune with the requirements of the SLA. Selected Bidder needs to maintain the Log Book for such preventive and reactive maintenance activities. Preventive Maintenance should be carried out at least once in every quarter, which includes (but not limited to):

- Checking for any loose contacts in the cables & connections for the respective infrastructure and equipment
- Run diagnostics tests on respective infrastructure and equipment.
- In case any components are non functional on account of issues beyond the control of selected bidder, it must be ensured that all such components are in working condition by providing power

supply through DG sets and network ping reports are available. Cost for the same has to be borne by Selected Bidder.

- Cleaning and removal of dust and dirt from the interior and exterior of the equipment
- Ensuring that wirings / cable routings are done as per the standard
- Ensuring that wiring diagrams are updated, whenever there are modifications
- Ensuring the management of rack space equipment as needed
- Ensuring that all Software, Licenses, Tools, OEM Documentation (Knowledge base), ICCC documentation (with Manuals), other or backup tapes, disks and other media are kept properly labelled and organized in a file
- Carrying out and verifying back-ups consistency on regular intervals.
- Checking and listing all wear and tear of the equipment and site environment
- Ensuring no flammable material is present
- Clearing up any unnecessary items or spares. Cleanliness in ICCC needs to be ensured.
- Documentation of problems, cause and rectification procedures for building knowledge base of the known problems including root cause analysis will be under the scope of Selected Bidder
- Any other activity required for smooth operations
- Preventive maintenance must be carried out on quarterly basis and report to be submitted to GSCDL along with the quarterly invoice.

11.9 Configurations

All configurations under the project must be kept confidential by the Selected Bidder.

Complete configurations / re-configurations must be maintained by the Selected Bidder. The items would include (but not limited to) all hardware devices, servers, switches, Firewall, Intrusion Prevention System, EMS/NMS, core switches, applications, any other equipment, hardware / software under the project etc.

No unwanted changes must be carried out in the network or its elements. Any changes if required must be done with prior information and approval from GSCDL. Version management must be done by the selected bidder in case of any changes.

11.10 Asset Management / Inventory Management

The Selected Bidder will be responsible for complete asset management / inventory management of all components (IT and Not IT) under the project as per best industry practices. Details of all assets like hardware, software, peripherals, manuals, media and other related elements, etc., shall be maintained by recording information like make, model, configuration details, serial numbers, licensing agreements, warranty, place of installation, license validity, AMC/support validity etc.

Any device / equipment if removed temporarily must be documented. Software details with information such as Licenses, Version Numbers and Registration Details must be maintained and provided to GSCDL. Selected Bidder is responsible for license management and must inform GSCDL promptly in case of any upcoming renewals.

Any reports required by GSCDL must be provided promptly. Selected Bidder must maintain a complete list of inventory and update the same promptly.

GSCDL may ask the selected bidder to provide the Asset Management Reports / Inventory Management Reports at any point of time including at the time of invoice submission. The bidder must provide the same to GSCDL promptly.

11.11 AMC / Support from OEMs and Vendors

Selected Bidder must ensure timely service / maintenance of all the equipment (IT and Non IT). Bidder to repair / replace the faulty equipment immediately to maintain the SLA. Maintenance and consumable costs will be borne by the selected bidder and must not be billed to GSCDL. The AMC / Vendor support must be available for the entire duration of contract.

The selected bidder once onboarded (on issuance of work order) must raise invoices only for locations/components which are functional. The invoice submitted must deduct the amounts as quoted in the BoQ of locations / components which are non functional. In case such deductions are not carried out by Selected Bidder during invoicing, then GSCDL reserves the right to deduct such amounts. Authority's decision in this regard would be final.

The selected bidder will be responsible for all costs associated with the upgrade of licenses, software, and firmware for the entire contract duration. The same must be done at no cost to GSCDL and with GSCDL's prior approval.

The Selected Bidder must review all SOPs and Use cases and ensure that the same are in continued unless otherwise indicated by authority. New USE CASES must be suggested by selected bidder and related documents as per IMAF 2.0 standards (or upgraded guidelines) must be prepared.

The selected bidder must ensure that all equipment shall at all times be fully insured and be kept under current warranty and upgraded support from OEM and the same shall be transferred to client at the end of the term (or the extended term) if any

The successful bidder shall provide patches and updates of all the materials like OS, firmware of products, software, VMS etc. free of cost for 24 months.

The successful bidder is encouraged to undertake a site survey of the existing IT/ICT components installed. The list along with locations is provided along with the RFP

Operations and Maintenance services for the software, hardware and other IT and Non-IT infrastructure/devices installed under the project as provided in scope of work above, for 24 months after issue of work order. Warranty period of the components installed under project i.e. hardware, software, IT/Non-IT etc., to be ensured by successful bidder for 24 months from the date of issue of work order

Replacement of all defective components/accessories must be carried out by the selected bidder without any cost to GSCDL, whether the components/accessories are End of Life or not. The bidder must ensure that sufficient support from the concerned OEMs/Vendors is available for the entire project duration of 24 months. Bidder must submit an authorization from OEMs/Vendors confirming support for the entire contract duration.

- carrying out the necessary repairs and replacement of parts wherever needed to keep the service & operation levels of the IT & non-IT equipment of ICCC in tune with the requirements of the SLA.
- preventive maintenance should be prioritized during beyond normal office hours (i.e. 10 am to 6 pm on weekdays) of ICCC operations. GSCDL to be informed in advance
- Selected Bidder needs to maintain the Logbook for such preventive and reactive maintenance activities. Preventive Maintenance should be carried out at least once in every quarter
- Checking for any loose contacts in the cables & connections for the respective infrastructure and equipment. Early rectification of cable faults. Making sure that cables are joined properly

  - Run diagnostics tests on respective infrastructure and equipment. Necessary devices for power supply, network provisions or any other required device/infrastructure will be under the scope of the bidder without any financial implication on GSCDL
  - Cleaning and removal of dust and dirt from the interior and exterior of the equipment.
  - Ensuring that wiring is done as per the standard.
  - Ensuring that wiring diagrams are updated, whenever there are modifications.
  - Ensuring the management of rack space equipment as needed
  - Ensuring that all Software, Tools, OEM Documentation (Knowledge base), ICCC documentation (with Manuals), other or backup tapes, disks and other media are kept properly labelled and organized in catalogue
  - Carrying out and verifying back-ups consistency on regular intervals.
  - Checking and listing all wear and tear of the equipment and site environment
  - Ensuring no flammable material is present
  - Clearing up any unnecessary items or spares. ICCC operator needs to ensure cleanliness within ICCC
  - Any other activity required for smooth operations. Warranty and maintenance/ troubleshooting of hardware problems of all available IT Infrastructure including network (active / passive) equipment's, Security, etc. and support infrastructure equipment's UPS, AC, DG Sets etc. and rectification of the same
  - Documentation of problems, isolation, cause and rectification procedures for building knowledge base of the known problems
  - During the term of this agreement the bidder agrees to maintain the equipment in good working order and for this purpose will provide the following repair and maintenance service
  - The bidder shall correct any faults and failures in the equipment and shall repair and replace worn or defective parts of the equipment during Client's normal working hours on all working days. In cases where unserviceable parts of the equipment need replacement the bidder shall replace such parts, at no extra cost to Client, with brand new parts or those equivalent to new parts in performance. The bidder shall further ensure that the equipment is not down at any time for want of spare parts.
  - Failure in adhering to any of the terms and conditions mentioned in the scope of work will attract penalty clause.
  - Report on preventive maintenance must be provided to authority with complete details on periodic basis along with logs and details of replacement
- The successful bidder shall be responsible for prompt maintenance/repair/replacement of components on which there is dependance on third party without any cost to GSCDL
- Regular software upgradations to be ensured by the successful bidder with information to GSCDL. Security of all systems to be ensured by the successful bidder without any cost to GSCDL
- Successful bidder has to submit a security audit report (from empaneled information security auditing organizations by CERT-In on quarterly basis to GSCDL for all its systems) without any cost to GSCDL
- A separate schedule for dismantling and reinstallation charges has been provided as a part of this RFP. The said charges will be valid for the entire contract duration. The quantities mentioned in the schedule 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 finalised rate under this RFP for the entire contract period.
- Regular maintenance of service cabinet/fuse box to avoid loose connections
- Regular cleaning of the lens covers to keep it free of dust/dirt
- Regular updates and upgrades of the centralized software at command and control center
- The Bidder shall monitor the electrical load on each phase & each circuit in the panel & also

- Maintain load balance equally on all the phases. Bidder shall never allow any circuit to be overloaded. However, Concessioner need to highlight the areas with proper justification where load balancing is not possible
- The Bidder need to ensure that adequate spares are retained at all times to meet onsite warranty/support and SLA requirements
- the maintenance services involves comprehensive maintenance of all component covered under the contract, including repairing, replacement of parts, modules, sub-modules, assemblies, sub-assemblies, spares part, updating, security alerts and patch uploading etc. to make the system operational
- Bidder shall insure all the WiFi APs to ensure theft protection of all APs throughout the contract period
- Maintain IP based Surveillance System at selected places of Gandhinagar City to provide security to the citizens. Bidder has to quote all required materials which may be required to operate and maintain entire system based on their site survey, including all spare parts support of all hardware, software, equipment, accessories, electrical wiring, software etc.
- Operate and maintain Automatic Number Plate Recognition System at Entry & Exit point of Gandhinagar City. Bidder is suggested to do site survey before participating in the tender. Bidder has to quote all required materials which may be required to operate and maintain entire system based on their site survey. Bidder has to operate and maintain CCTV cameras for ANPR in such a way that Number plate of all vehicles can be identified and stored at the control room. The Automatic Number Plate Recognition System and related videos as well as the surveillance video feed should go to the central control rooms, whereas the processing and recording of the video footage of ANPR shall take place at intersection itself.
- Vehicle Speed detection system needs to be operated and maintained as a part of CCTV surveillance system. System should be operated and maintained in such a way that speed limit can be changed time to time. An alert should be generated at the command-and-control room when any vehicle is crossing maximum speed limit & automatic challan shall be generated (Database shall be connected to RTO database). Data (Image & Video) of supporting evidence must be kept in the control room for 30 days.
- For smart streetlights below activities must be monitored and operated through Integrated command & Control room.
    - During Day time, all LED should be remained in “OFF” state.
    - At Night, all LED should be remained in “ON” state. In “ON” state, LED light must have low intensity (Not less than 10 LUX at ground level in Low Intensity state) during no traffic / no movement period in surrounded area.
- Bidder shall provide monitoring facility at control room which shall give status as ON, OFF or Deemed.
- O&M of Smart Poles and their sub components like Environment sensors, WiFi, Panic Buttons, PTZ cameras, VMDs
- Successful bidder is responsible for operation and maintenance of Command and Control room for the entire project in Gandhinagar city which is already set up. All deliverables of the project shall be managed through command & Control room.
- Video Monitoring & Display: Successful bidder needs to operate and maintain 4X3 video wall for display of CCTV cameras and other components.
- All required Servers, Storage, Software, Firewall, Network Switches for entire project shall be operated and maintained in the integrated control room.
- Bidder may be asked by GSCDL to carry out integration of existing components/solutions with any ongoing/existing applications based on requirement/need of GSCDL. Selected Bidder needs to be prepared in this regard. No extra payment in this regard will be made to the selected bidder.

- The bidder, if selected, shall provide RESTful APIs of system/s implemented as part of this RFP for integration with any other system/s implemented by GSCDL/GMC/other stakeholders in future. No extra payment in this regard will be made to the selected bidder.

Bidder's Obligation

- Selected Bidder's obligations shall include all the activities as specified by the Authority in the Scope of Work and other sections of the Tender and Contract and changes thereof to enable Authority to meet the objectives and operational requirements. It shall be Selected Bidder's responsibility to ensure the proper and successful implementation, performance and continued operation of the proposed solution in accordance with and in strict adherence to the terms of his Bid, the Tender and this Contract.
- The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 45 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.
- In addition to the aforementioned, Selected Bidder shall provide services to manage and maintain the said system and infrastructure as mentioned in RFP
- Authority reserves the right to interview the personnel proposed that shall be deployed as part of the project team. If found unsuitable, the Authority may reject the deployment of the personnel. But ultimate responsibility of the project implementation shall lie with Selected Bidder
- Authority reserves the right to require changes in personnel which shall be communicated to Selected Bidder. Selected Bidder with the prior approval of the Authority may make additions to the project team. Selected Bidder shall provide the Authority with the resume of Key Personnel and provide such other information as the Authority may reasonably require. The Authority also reserves the right to interview the personnel and reject, if found unsuitable. In case of change in its team members, for any reason whatsoever, Selected Bidder Shall also ensure that the exiting members are replaced with at least equally qualified and professionally competent members.
- Selected Bidder shall ensure that none of the Key Personnel as mentioned in RFP and manpower exit from the project during first 6 months of the beginning of the project. In such cases of exit, a penalty of INR 2 lacs per such replacement shall be imposed on SELECTED BIDDER.
- Selected Bidder should submit profiles of only those resources who shall be deployed on the project. Any change of resource should be approved by the Authority and compensated with equivalent or better resource. The Authority may interview the resources suggested by SELECTED BIDDER before their deployment on board. It does not apply in case of change requested by the Authority.
- In case of change in its team members, Selected Bidder shall ensure a reasonable amount of time overlap in activities to ensure proper knowledge transfer and handover/takeover of documents and other relevant materials between the outgoing and the new member.
- Selected Bidder shall ensure that proposed Team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract. SELECTED BIDDER shall ensure that the services are performed through the efforts of Selected Bidder's Team, in accordance with the terms hereof and to the satisfaction of the Authority. Nothing in this Contract relieves Selected Bidder from its liabilities or obligations under this Contract to provide the Services in accordance with the Authority's directions and requirements and as stated in this Contract and the Bid to the extent accepted by the Authority and Selected Bidder shall be liable for any non- performance, non-compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its Team.
- Selected Bidder shall be fully responsible for deployment/installation/development and integration of all the software and hardware components and resolve any problems/issues that may arise due to integration of components.

- All the software licenses that Selected Bidder proposes should be perpetual software licenses. The software licenses shall not be restricted based on location and the Authority should have the flexibility to use the software licenses for other requirements if required.
- All the OEMs that Bidder proposes should have Dealer possession licenses.
- The Authority reserves the right to review the terms of the Warranty and Annual Maintenance agreements entered into between Selected Bidder and OEMs and no such agreement/contract shall be executed, amended, modified and/or terminated without the prior written consent of the Authority. An executed copy of each of such agreements/contracts shall, immediately upon execution be submitted by Selected Bidder to the Authority.
- Selected Bidder shall ensure that none of the components and sub-components is declared end-of-sale or end-of-support by the respective OEM at the time of submission of bid. If the OEM declares any of the products/solutions end-of-sale subsequently, the Selected Bidder shall ensure that the same is supported by the respective OEM for contract period.
- If a product is de-supported by the OEM for any reason whatsoever, from the date of Acceptance of the System till the end of contract, Selected Bidder should replace the products/solutions with an alternate that is acceptable to the Authority at no additional cost to the Authority and without causing any performance degradation.
- The Licenses will be in the name of Authority only.
- Selected Bidder shall ensure that the OEMs provide the support and assistance to Selected Bidder in case of any problems/issues arising due to integration of components supplied by him with any other component(s)/product(s) under the purview of the overall solution. If the same is not resolved for any reason whatsoever, Selected Bidder shall replace the required component(s) with an equivalent or better substitute that is acceptable to Authority without any additional cost to the Authority and without impacting the performance of the solution in any manner whatsoever.
- Selected Bidder shall ensure that the OEMs for hardware servers/equipment supply and/or installation of all type of updates, patches, fixes and/or bug fixes for the firmware or software from time to time at no additional cost to the Authority.
- Selected Bidder shall ensure that the OEMs for hardware servers/equipment or Bidder's trained engineers conduct the preventive maintenance on a Quarterly basis and break-fix maintenance in accordance with the best practices followed in the industry. Selected Bidder shall ensure that the documentation and training services associated with the components shall be provided by the OEM partner or OEM's certified training partner without any additional cost to the Authority.
- The training has to be conducted using official OEM course curriculum mapped with the hardware/Software Product's to be implemented in the project.
- Selected Bidder and their personnel/representative shall not alter/change/replace any hardware component proprietary to the Authority and/or under warranty or O&M of third party without prior consent of the Authority.
- Selected Bidder shall provision the required critical spares/components at the designated Datacenter Sites/office locations of the Authority for meeting the uptime commitment of the components supplied by him.
- Selected Bidder's representative(s) shall have all the powers requisite for the execution of scope of work and performance of services under this contract. Selected Bidder's representative(s) shall liaise with the Authority's representative for the proper coordination and timely completion of the works and on any other matters pertaining to the works. Selected Bidder shall extend full co-operation to Authority's representative in the manner required by them for supervision/inspection/observation of the equipment/goods/material, procedures, performance, progress, reports and records pertaining to the works. He shall also have complete charge of Selected Bidder's personnel engaged in the performance of the works and to ensure compliance of rules, regulations and safety practice. He shall also cooperate with the other Service Providers/Vendors of the Authority working at the Authority's office locations & field locations

and DC site. Such Bidder's representative(s) shall be available to the Authority's Representative at respective Datacenter during the execution of works.

- Selected Bidder shall be responsible on an ongoing basis for coordination with other vendors and agencies of the Authority in order to resolve issues and oversee implementation of the same. Selected Bidder shall also be responsible for resolving conflicts between vendors in case of borderline integration issues.
- Selected Bidder is expected to set up a project office in Ahmedabad/Gandhinagar City. The technical manpower deployed on the project should work from the same office. However, some resources may be required to work from the client office during the contract period.

Selected Bidder is required to liaison with the existing Internet Service Provider and ensure that services are not interrupted.

11.12 Storage/Recording Requirements

System/Solution	Onsite/Local Storage	Primary Storage(At Main ICCC)	Secondary Storage(At Main ICCC)	Secondary Storage(At Main ICCC) Flagged data	Cloud DC	Cloud DR
General Surveillance: All fixed and/or PTZ camera at various locations. (including bus stops, Smart poles and other general surveillance locations as specified in RFP scope)	NA	7 days	30 days	180 days	NA	NA
Inside Bus Camera-fixed Dome	At mobile DVR for 3 days	Auto Sync up data for 7 days	30 days	180 days	NA	NA
Traffic Enforcement (ANPR , RLVD , SVD)	At Local Processing Unit (LPU) for 7 days	7 days	30 days	365 days	Application hosted at Cloud DC will access traffic violation data from ICCC	NA
Rest all Sensors, Edge Devices, etc.	NA	NA	NA	All such data shall be stored for 180 days.	All such data shall be stored for 180 days.	
ATCS traffic junction data	NA	365 days	365 days	4 years		

- For ATCS, Primary storage will be for 90 days and Secondary Storage for 275 days. Back up storage for 4 Years approximately.

- Data on storage would be over-written automatically by newer data after the stipulated time period. If some data is flagged by police personnel (or by designated personnel) as important data / evidence data due to some reporting of crime or accident in the area or due to court order or due to suspicious activity, it would need to be stored for longer duration, as per requirements. Gandhinagar Police would analyse such flagged data every 3months to take such decisions for preservation of the flagged data beyond 180 days.
- Full audit trail of reports to be maintained for 90 days.
- Bidder is expected to carry out the storage requirement estimation and supply as per the solution proposed.
- Primary and Secondary storage proposed must be separate hardware.
- In case of primary storage unavailability/failure the data all systems must be able to start storing data on secondary storage. On retrieval of primary storage all data to primary storage shall be synced up from secondary storage.
- Archival/Backup on secondary storage at interim ICCC shall be done on NAS / Scale-out NAS / SAN / Unified or equivalent storage solution.
- Retrieval time for any data stored on secondary storage should be max. 4 hours for critical data & 8 hours for other data.
- The recording servers / system, once configured, shall run independently of the Video Management system and continue to operate in the event that the Management system is off-line.
- 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.
- The system shall support H.264 or better, MPEG-4 and MJPEG compression formats for all analog cameras connected to encoders and all IP cameras connected to the system.
- The system shall record the native frame rate and resolution supplied by the camera or as configured by the operator from the system administration server. The system should not limit amount of storage to be allocated for each connected device.
- The on-line archiving capability shall be transparent and allow Gandhinagar Police to browse and archive recordings without the need to restore the archive video to a local hard drive for access.
- 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.
- 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 and sound alerts to necessary personnel.
- Bandwidth optimisation
- The Recording Server / System shall offer different codec (H.264, MJPEG, MPEG-4, etc.) and frame rate (CIF, 4CIF, QCIF) options for managing the bandwidth utilisation for live viewing on the Client systems. (through use of multiple systems such as transcoding server)
- From the Gandhinagar Police, 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.
- The Recording Server / System shall support camera (analogue and IP cameras) devices from various manufacturers.
- The Recording Server / System shall support the PTZ protocols of the supported devices listed by the camera OEMs.
- The system shall support full two-way audio between Client systems and remote devices. (Audio from certain set of cameras can be recorded in future).

- 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 in the event that 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. v. SNMP Support
- The system shall support Simple Network Management Protocol (SNMP) in order 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 as a result of rule activation in addition to other existing rule actions.

11.13 Preventive Maintenance

- During the term of this agreement the bidder agrees to maintain the equipment in good working order and for this purpose will provide the following repair and maintenance service
- The bidder shall correct any faults and failures in the equipment and shall repair and replace worn or defective parts of the equipment during Client's normal working hours on all working days. In cases where unserviceable parts of the equipment need replacement the bidder shall replace such parts, at no extra cost to Client, with brand new parts or those equivalent to new parts in performance. The bidder shall further ensure that the equipment is not down at any time for want of spare parts.
- Failure in adhering to any of the terms and conditions mentioned in the scope of work will attract penalty clause.
- Report on preventive maintenance must be provided to authority with complete details on periodic basis along with logs and details of replacement

GIS Scope of Work (applicable from 29th Jan 2026 till the end of contract period)

Successful Bidder would be completely responsible for the defect free functioning of the application software and would undertake following as part of ATS for Application Software:

- Resolve any issues including bug fixing, improvements in presentation and/or functionality and others within a duration mentioned in Service Level Agreement.
- Provide the latest updates, patches / fixes, version upgrades relevant for the software components.

Software version management and software documentation management reflecting features and functionality of the solution. Annual Maintenance Contract (AMC) for all Software component supplied under this project

- Provide the latest updates, patches / fixes, version upgrades, etc.
- Bidder has to ensure that annual technical support is available for software application, operating systems, and database for the entire O&M phase.
- Software version management and software documentation management reflecting features and functionality of the solution.
- Database / Application Software tuning to enhance the performance of the overall system
- Undertake regular, proactive Database Management activities.

GIS Data Management

Successful Bidder would be responsible for extending all possible support to different departmental or contract staff for Data Management (like Data entry Screens, Report Generation, Data Analysis, Data Cleansing, etc.). Data could be in English as well as in Gujarati. Data should be Unicode compliant. For the data entered during the Base Map Creation/Updating, Bidder will be responsible for data management of

the collected data and its digitization. Also GSCDL intends to carry out GIS based field surveys for collection of spatial and non-spatial attributes from the field. The successful bidder has to support the departments and its survey teams. The successful bidder will also have to train and support the department officials in using the enterprise GIS setup by importing the surveyed GIS data for each department into the enterprise GIS database and maintaining it for department specific edits and application development.

Application Software Additions / Enhancements / Modifications

GSCDL will be adding the department specific GIS and will develop department specific applications in the in consultation with various departments of GMC. Also the selected bidder will have to develop the GIS based modules for current working GIS application, for any concerned department as per availability of GIS spatial and non-spatial data for each department and department's request. The selected bidder will have to discuss the requirement of the application with the department and finalize the functional requirements of the application. The selected bidder will then have to propose commercials and schedule required for the development of the module which will be approved by the department after discussions. Post approval on commercials and schedule by the authority, the Selected Bidder will have to develop the GIS based module, conduct the testing to the satisfaction of the department, provide necessary training and get the module approved from the concerned department with necessary reports and completion letter from the Head of concerned Department.
Every new department module will be added as a part of GIS applications suite which is currently developed. In case GSCDL requires any modifications or enhancement in the deployed applications suite as well in the developed modules, GSCDL may ask for the services of the bidder's staff as per the requirement of the Change. This change would form the part of change management process, Bidder will be asked to submit a formal change request note along with the commercials and schedule of work completion. Post the approval of GSCDL the Change request will be processed and the activity can be completed.

Roles and Responsibility of the Successful Bidder are

1. Approval & Sign Off from each department for new modules developed
2. Provide support and Maintenance with its own man-power (at no additional cost to GSCDL) for the period starting 29th Jan 2025 till end of project
3. Preparation of necessary user manuals for all the modules and review of the same
4. Carry out Training programs / workshops for the department personnel
5. Should ensure the compliance with all the required standards as mentioned below and to obtain the quality and security certification from STQC or any other CERT-IN certified agency at their own expense.

Application	**Standard**
Workflow Design	WFMC/BPEL or Equivalent Standard
Web Portal	W3C / WCAG Standard
Information access / Transfer Protocols	SOAP, HTTP/HTTPS, UDDI, WSDL
Interoperability	Web Services, Open Standard
Photograph	JPEG, JPG, TIFF, PDF, etc. (minimum resolution 640 x 480 Pixels)
Scanned Documents	TIFF (Resolution of 600 x 600 dpi) / PDF, etc.
Information Security	ISO 27001 Certified System
Operational Integrity & Security Management	ISO 17799 Certified System
Operation	ISO 9001 Certified

IT Infrastructure Management	ITIL / EITM specification
Service Management	ISO 20000 specification or latest
Project Documentation	IEEE/ISO specifications for documentation
Data Standards	All-important data entities would be in line with standards published by DIT (http://egovstandards.gov.in)
Localization Standards	All applications would comply with standards published on http://egovstandards.gov.in
Government standards	GIGW compliant solution

7. Bidder should prepare and provide to GSCDL documents including User Manuals, Configuration Manuals, Operational Manual, Maintenance Manuals, etc. as per acceptable standards.
8. During the Project Term, Bidder would be completely responsible for defect free functionality of the application software and would resolve any solution related issues including bug fixing etc. within Project Term agreed between GSCDL and the Bidder.

Bidder should provide the latest updates, patches/ fixes, version upgrades relevant for the GIS solution components.

11.14 Project deliverables

Sr No	Key activities	Deliverables
1	Project Kick off	1. Project Plan 2. Risk Management Plan
2	Deployment of manpower	
3	Operation and Maintenance of IT, Non IT infrastructure and applications	1. Detailed plan for monitoring of SLAs and performance of the overall system 2. Fortnightly Progress Report 3. Monthly SLA Monitoring Report and Exception Report 4. Quarterly security Report 5. Issues logging and resolution report 6. License Status Report
4	SLA and Performance Monitoring	
5	Logging, tracking and resolution of issues	
6	Application enhancement	
7	Patch & Version Updates	

Selected Bidder must also (in order to acquaint to the existing operations) conduct the following key activities:

- Assess the existing of IT Infrastructure and Non IT Infrastructure
- Assessment of Business processes
- Assessment of Software
- Assess the Integrations
- Assess the existing connectivity all locations (including Building)
- Assessment of network laying
- Assessment of training requirement
- Existing Solution Architecture
- Assess the detailed drawings
- Assess the design of smart city solutions
- Assess the existing UATs
- Understanding Existing SOPs and Use Cases and reports being sent to various departments integrated with ICCC
- Understanding Helpdesk setup
- Understanding Physical Infrastructure setup
- Assessment of existing Equipment , edge devices, COTS software (if any), Licenses

- IT and Non IT Infrastructure Installations
- Assess existing Software Application customization (if any)
- Assess existing Bespoke Solution (if any)
- Assess Data Migration aspects
- Assess Integration with Third party services/application (if any)
- Assess Unit and User Acceptance Testing
- Under stand Implementation of Solutions
- Assess the existing As Built Drawings (if any)
- Assess existing User Manuals , training curriculum and training materials and suggest improvements to GSCDL and execute the suggestions as approved by GSCDL
- Assess SoP implementation
- Assess Integration with Smart Components
- Assess Integration of solutions with Command and Control Centre
- Assess all Go Live Reports

11.15 Exit management

- This sets out the provisions, which will apply on expiry or termination of the Master Service Agreement, the Project Implementation, Operation and Management SLA.
- 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.
- The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Schedule

11.16 Cooperation and Provision of Information

During the exit management period:

- The SELECTED BIDDER will allow the GSCDL 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 GSCDL to assess the existing services being delivered;
- Promptly on reasonable request by the GSCDL, the SELECTED BIDDER 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 SELECTED BIDDER or sub-contractors appointed by the SELECTED BIDDER). The GSCDL shall be entitled to copy of all such information. Such information shall include details pertaining to the services rendered and other performance data. The SELECTED BIDDER shall permit the GSCDL 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 SELECTED BIDDER and to assist appropriate knowledge transfer.

11.17 Confidential Information, Security and Data

The SELECTED BIDDER will promptly on the commencement of the exit management period supply to the GSCDL or its nominated agency the following:

- information relating to the current services rendered and customer and performance data relating to the performance of sub-contractors in relation to the services;
- documentation relating to Intellectual Property Rights;
- documentation relating to sub-contractors;
- all current and updated data as is reasonably required for purposes of GSCDL or its nominated agencies transitioning the services to its Replacement SELECTED BIDDER in a readily available format nominated by the GSCDL, its nominated agency;
- all other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable GSCDL or its nominated agencies, or its Replacement SELECTED BIDDER to carry out due diligence in order to transition the provision of the Services to GSCDL or its nominated agencies, or its Replacement SELECTED BIDDER (as the case may be).
- Before the expiry of the exit management period, the SELECTED BIDDER shall deliver to the GSCDL 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 SELECTED BIDDER shall be permitted to retain one copy of such materials for archival purposes only.

11.18 Transfer of Certain Agreements

On request by the GSCDL or its nominated agency the SELECTED BIDDER shall effect such assignments, transfers, licenses and sub-licenses GSCDL, or its Replacement SELECTED BIDDER in relation to any equipment lease, maintenance or service provision agreement between SELECTED BIDDER and third party lessors, vendors, and which are related to the services and reasonably necessary for the carrying out of replacement services by the GSCDL or its nominated agency or its Replacement SELECTED BIDDER.

11.19 General Obligations of the SELECTED BIDDER

- The SELECTED BIDDER shall provide all such information as may reasonably be necessary to effect as seamless a handover as practicable in the circumstances to the GSCDL or its nominated agency or its Replacement SELECTED BIDDER and which the SELECTED BIDDER has in its possession or control at any time during the exit management period.
- For the purposes of this Schedule, anything in the possession or control of any SELECTED BIDDER, associated entity, or sub-contractor is deemed to be in the possession or control of the SELECTED BIDDER.
- The SELECTED BIDDER shall commit adequate resources to comply with its obligations under this Exit Management Schedule.

11.20 Exit Management Plan

- The SELECTED BIDDER shall provide the GSCDL or its nominated agency with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following 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.
  - A detailed program of the transfer process that could be used in conjunction with a Replacement SELECTED BIDDER including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;
  - plans for the communication with such of the SELECTED BIDDER's sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on the GSCDL's operations as a result of undertaking the transfer;
  - (if applicable) proposed arrangements for the segregation of the SELECTED BIDDER's networks from the networks employed by GSCDL and identification of specific security tasks necessary at termination;
  - Plans for provision of contingent support to GSCDL, and Replacement SELECTED BIDDER for a reasonable period after transfer.
- The SELECTED BIDDER shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
- Each Exit Management Plan shall be presented by the SELECTED BIDDER to and approved by the GSCDL or its nominated agencies.
- The terms of payment as stated in the Terms of Payment Schedule include the costs of the SELECTED BIDDER complying with its obligations under this Schedule.
- In the event of termination or expiry of MSA, and Project Implementation, each Party shall comply with the Exit Management Plan.
- During the exit management period, the SELECTED BIDDER shall use its best efforts to deliver the services.
- Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.
- Exit Management plan shall be furnished in writing to the GSCDL or its nominated agencies within 90 days from the Effective Date of this Agreement.

11.21 Compliance to Standards & Certifications

For a large and complex set up such as the Project, it is imperative that the highest standards applicable are adhered to. In this context, the SELECTED BIDDER will ensure that the entire Project is developed in compliance with the applicable standards.

During project duration, the SELECTED BIDDER will ensure adherence to prescribed standards as provided below:

Sl. No.	Component/Application/System	Prescribed Standard
1.	Information Security	ISO 27001
2.	IT Infrastructure Management	ITIL specifications
3.	Service Management	ISO 20000 specifications
4.	Project Documentation	IEEE/ISO/CMMi (where applicable) specifications for documentation
5.	Cloud Data Centre	TIA 942/ Uptime Institute certifications

Apart from the above the SELECTED BIDDER need to ensure compliance of the project with Government of India IT security guidelines including provisions of:

- The Information Technology Act, 2000" and amendments thereof and
- Guidelines and advisories for information security published by Cert-In/DeitY (Government of India) issued till the date of publishing of tender notice. Periodic changes in these guidelines during project duration need to be complied with.

While writing any source code for application modules the SELECTED BIDDER should ensure high-quality documentation standards to improve the readability of the software module. An illustrative list of comments that each module contained within the source file should be preceded by is outlined below:

- The name of the module
- The date when module was created
- A description of what the module does
- A list of the calling arguments, their types, and brief explanations of what they do
- A list of required files and/or database tables needed by the module
- Error codes/Exceptions
- Operating System (OS) specific assumptions
- A list of locally defined variables, their types, and how they are used
- Modification history indicating who made modifications, when the modifications were made, and what was done.

Apart from the above SELECTED BIDDER needs to follow appropriate coding standards and guidelines inclusive of but not limited to the following while writing the source code -

- Proper and consistent indentation
- Inline comments
- Structured programming
- Meaningful variable names

- Appropriate spacing
- Declaration of variable names
- Meaningful error messages

11.22 Quality Audits

GSCDL, at its discretion, may also engage independent auditors to audit any/some/all standards/processes. The SELECTED BIDDER shall support all such audits as per calendar agreed in advance. The result of the audit shall be shared with the SELECTED BIDDER who has to provide an effective action plan for mitigations of observations/non-compliances, if any.

11.23 Project Management and Governance

11.23.1 Project Management Office (PMO)

A Project Management office is available at GSCDL. The PMO will, at the minimum, include a designated full time Project Manager from SELECTED BIDDER. It will also include key persons from other relevant stakeholders including members of GSCDL and other officials/representatives by invitation. The operational aspects of the PMO need to be handled by the SELECTED BIDDER including maintaining weekly statuses, minutes of the meetings, weekly/monthly/project plans, etc.

PMO will meet formally on a weekly basis covering, at a minimum, the following agenda items:

- Project Progress
- Delays, if any – Reasons thereof and ways to make-up lost time
- Issues and concerns
- Performance and SLA compliance reports;
- Unresolved and escalated issues;
- Project risks and their proposed mitigation plan
- Discussion on submitted deliverable
- Timelines and anticipated delay in deliverable if any
- Any other issues that either party wishes to add to the agenda.
- Bidder shall recommend PMO structure for the operations and maintenance phase.

11.23.2 Helpdesk and Facilities Management Services

A central helpdesk dedicated (i.e. on premise) for the Project is set up at ICCC. Functional requirements of the helpdesk management system, fully integrated with the enterprise monitoring and network management system. The system will be accessed by the stakeholder department officials for raising their incidents and logging calls for support. The detailed service levels and response time, which the SELECTED BIDDER is required to maintain for provisioning of the FMS services are described in the Service Level Agreement of this Tender.

11.23.3 Steering Committee

The Steering Committee will consist of senior stakeholders from GSCDL, its nominated agencies and SELECTED BIDDER. SELECTED BIDDER will nominate its Smart City vertical head to be a part of the Project Steering Committee.

The SELECTED BIDDER shall participate in monthly Steering Committee meetings and update Steering Committee on Project progress, Risk parameters (if any), Resource deployment and plan, immediate tasks, and any obstacles in project. The Steering committee meeting will be a forum for seeking and getting approval for project decisions on major changes etc.

All relevant records of proceedings of Steering Committee should be maintained, updated, tracked and shared with the Steering Committee and Project Management Office by SELECTED BIDDER. The meetings will be held at least once a quarter.

Other than the planned meetings, in exceptional cases, GSCDL may call for a Steering Committee meeting with prior notice to the SELECTED BIDDER.

11.23.4 Project Monitoring and Reporting

The SELECTED BIDDER shall circulate written progress reports at agreed intervals to GSCDL and other stakeholders. Project status report shall include Progress against the Project Management Plan, status of all risks and issues, exceptions and issues along with recommended resolution etc.

Other than the planned meetings, in exceptional cases, project status meeting may be called with prior notice to the Bidder. GSCDL reserves the right to ask the bidder for the project review reports other than the standard weekly review reports.

11.23.5 Risk and Issue management

The SELECTED BIDDER shall develop a Risk Management Plan and shall identify, analyse and evaluate the project risks, and shall develop cost effective strategies and action plans to mitigate those risks.

The SELECTED BIDDER shall carry out a Risk Assessment and document the Risk profile of GSCDL based on the risk appetite and shall prepare and share the GSCDL Enterprise Risk Register. The SELECTED BIDDER shall develop an issues management procedure to identify, track, and resolve all issues confronting the project. The risk management plan and issue management procedure shall be done in consultation with GSCDL.

The SELECTED BIDDER shall monitor, report, and update the project risk profile. The risks should be discussed with GSCDL and a mitigation plan be identified during the project review/status meetings. The Risk and Issue management should form an agenda for the Project Steering Committee meetings as and when required.

11.23.6 Governance procedures

SELECTED BIDDER shall document the agreed structures in a procedures manual

11.23.7 Planning and Scheduling

The SELECTED BIDDER will prepare a detailed schedule and plan for the entire project covering all tasks and sub tasks required for successful execution of the project. The SELECTED BIDDER has to get the plan approved from GSCDL at the start of the project and it should be updated every week to ensure tracking of the progress of the project.

The project plan should include the following:

- The project break up into logical phases and sub-phases;
- Activities making up the sub-phases and phases;
- Components in each phase with milestones;
- The milestone dates are decided by GSCDL in this RFP. SELECTED BIDDER cannot change any of the milestone completion dates. SELECTED BIDDER can only propose the internal task deadlines while keeping the overall end dates the same. SELECTED BIDDER may suggest improvement in project dates without changing the end dates of each activity.
- Key milestones and deliverables along with their dates including those related to delivery and installation of hardware and software;

- Start date and end date for each activity;
- The dependencies among activities;
- Resources to be assigned to each activity;
- Dependency on GSCDL

11.23.8 License Metering / Management

The SELECTED BIDDER shall track software usage throughout the IT setup so as to effectively manage the risk of unauthorized usage or under-licensing of software installed at the ICCC, and DC. This may be carried out through the use of standard license metering tools. In case of any solutions being proposed for this activity, the cost associated would be borne by the selected bidder No cost will be borne by GSCDL.

11.24 Change Management & Control

The SELECTED BIDDER agrees that the requirements given in the Bidding Documents are minimum requirements and are only indicative. The vendor would need to etch out the details at the time of preparing the design document prior to actual implementation. It shall be the responsibility of the SELECTED BIDDER to meet all the requirements of technical specifications contained in the RFP and any upward revisions and/or additions of quantities, specifications sizes given in the Bidding Documents required to be made during execution of the works, shall not constitute a change order and shall be carried out without a change order and shall be carried out without any time and cost effect to Purchaser.

Further upward revisions and or additions required to make SELECTED BIDDER's selected equipment and installation procedures to meet Bidding Documents requirements expressed and to make entire facilities safe, operable and as per specified codes and standards shall not constitute a change order and shall be carried out without any time and cost effect to Purchaser.

Any upward revision and/or additions consequent to errors, omissions, ambiguities, discrepancies in the Bidding Documents which the SELECTED BIDDER had not brought out to the Purchaser's notice in his bid shall not constitute a change order and such upward revisions and/or addition shall be carried out by SELECTED BIDDER without any time and cost effect to Purchaser.

11.25 Change Order

The Change Order will be initiated only in case (i) the Purchaser directs in writing the SELECTED BIDDER to include any addition to the scope of work covered under this Contract or delete any part of the scope of the work under the Contract, (ii) SELECTED BIDDER requests to delete any part of the work which will not adversely affect the operational capabilities of the facilities and if the deletions proposed are agreed to by the Purchaser and for which cost and time benefits shall be passed on to the Purchaser, (iii) the Purchaser directs in writing the SELECTED BIDDER to incorporate changes or additions to the technical specifications already covered in the Contract.

Any changes required by the Purchaser over and above the minimum requirements given in the specifications and drawings etc. included in the Bidding Documents before giving its approval to detailed design or Engineering requirements for complying with technical specifications and changes required to ensure systems compatibility and reliability for safe operation (As per codes, standards and recommended practices referred in the Bidding Documents) and trouble free operation shall not be construed to be change in the schedule of Contract Prices and adjustment of the implementation schedule if any.

If parties agree that the Contract does not contain applicable rates or that the said rates are inappropriate or the said rates are not precisely applicable to the variation in question, then the parties shall negotiate

a revision of the Contract Price which shall represent the change in cost of the works caused by the Variations. Any change order shall be duly approved by the Purchaser in writing.

Within ten (10) working days of receiving the comments from the Purchaser or the drawings, specification, purchase requisitions and other documents submitted by the SELECTED BIDDER for approval, the SELECTED BIDDER shall respond in writing, which item(s) of the Comments is/are potential changes(s) in the Scope of work of the RFP document covered in the Contract and shall advise a date by which change order (if applicable) will be submitted to the Purchaser.

11.26 Testing and Acceptance Criteria

A comprehensive system should be set up that would have the capability to log & track the testing results, upload & maintain the test cases and log & track issues/bugs identified. During O&M , penetration testing to be conducted on yearly basis and vulnerability assessment to be conducted on half-yearly basis the production environment should not be used for testing and training purpose. If any production data is used for testing, it should be masked and it should be protected.

Selected Bidder shall demonstrate the following mentioned acceptance criteria prior to acceptance of the solution as well as during project operations phase, in respect of scalability and performance etc. The Selected Bidder may propose further detailed Acceptance criteria which the GSCDL will review. Once GSCDL provides its approval, the Acceptance criteria can be finalized. In case required, parameters might be revised by GSCDL in mutual agreement with bidder and the revised parameters shall be considered for acceptance criteria. A comprehensive system should be set up that would have the capability to log & track the testing results, upload & maintain the test cases and log & track issues/bugs identified.

The following table depicts the details for the various kinds of testing envisaged for the project:

Type of Testing	**Responsibility**	**Scope of Work**
System Testing	Selected Bidder	Selected Bidder to perform System testing Selected Bidder to prepare test plan and test cases and maintain it. GSCDL may request the SELECTED BIDDER to share the test cases and results Selected Bidder Should be performed through manual as well as automated methods Selected Bidder Automation testing tools to be provided by Selected Bidder. GSCDL doesn't intend to own these tools
Integration Testing	Selected Bidder	Selected Bidder to perform Integration testing Selected Bidder to prepare and share with GSCDL the Integration test plans and test case to perform Integration testing as per the approved plan Integration testing to be performed through manual as well as automated methods Automation testing tools to be provided by SELECTED BIDDER. GSCDL doesn't intend to own these tools
Performance and load Testing	Selected Bidder GSCDL / Third Party Auditor (to monitor the performance testing)	Selected Bidder to do performance and load testing. Various performance parameters such as transaction response time, throughput, page loading time should be taken into account. Load and stress testing of the Project to be performed on business transaction volume Test cases and test results to be shared with GSCDL. Performance testing to be carried out in the exact same architecture that would be set up for production. Selected Bidder need to use performance and load

Type of Testing	Responsibility	Scope of Work
		testing tool for testing. GSCDL doesn't intend to own these tools. GSCDL if required, could involve third party auditors to monitor/validate the performance testing. Cost for such audits will not be paid by GSCDL. Testing tools if required, to be provided by Selected Bidder. GSCDL doesn't intend to own these tools During O&M phase, penetration testing to be conducted on yearly basis and vulnerability assessment to be conducted on half-yearly basis. GSCDL will also involve third party auditors to perform the audit/review/monitor the security testing carried out by Selected Bidder. Cost for such auditors to be paid by GSCDL.
User Acceptance Testing of Project	GSCDL or GSCDL appointed third party auditor	GSCDL / GSCDL appointed third party auditor to perform User Acceptance Testing Selected Bidder to prepare User Acceptance Testing test cases UAT to be carried out in the exact same environment/architecture that would be set up for production Selected Bidder should fix bugs and issues raised during UAT and get approval on the fixes from GSCDL / third party auditor before production deployment Changes in the application as an outcome of UAT shall not be considered as Change Request. Selected Bidder has to rectify the observations.

Bidder needs to provide the details of the testing strategy and approach including details of intended tools/environment to be used by SELECTED BIDDER for testing in its technical proposal. GSCDL does not intend to own the tools.

The SELECTED BIDDER shall work in a manner to satisfy all the testing requirements and adhere to the testing strategy outlined. The SELECTED BIDDER must ensure deployment of necessary resources and tools during the testing phases. The SELECTED BIDDER shall perform the testing of the solution based on the approved test plan, document the results and shall fix the bugs found during the testing. It is the responsibility of SELECTED BIDDER to ensure that the end product delivered by the SELECTED BIDDER meets all the requirements specified in the RFP. The SELECTED BIDDER shall take remedial action based on outcome of the tests.

The SELECTED BIDDER shall arrange for environments and tools for testing and for training as envisaged. Post Go-Live; the production environment should not be used for testing and training purpose. If any production data is used for testing, it should be masked and it should be protected. Detailed process in this regard including security requirement should be provided by the SELECTED BIDDER in its technical proposal. The process will be finalized with the selected bidder.

All the Third Party Auditors (TPA) as mentioned above will be appointed and paid by GSCDL directly. All tools/environment required for testing shall be provided by the SELECTED BIDDER.

STQC/Other agencies appointed by GSCDL shall perform the role of TPA. SELECTED BIDDER needs to engage with the TPA at the requirement formulation stage itself. This is important so that unnecessary re-work is avoided and the audit is completed in time. The audit needs to be completed before Go-Live of different phases. SELECTED BIDDER needs to prepare and provide all requisite information/documents to third party auditor and ensure that there is no delay in overall schedule.

The cost of rectification of non-compliances shall be borne by the SELECTED BIDDER.

It will be the responsibility of the selected bidder to submit the successful results of various testing within stipulated time as required and mentioned in the RFP. If the bidder fails to do so, the authority reserves the right to withhold the payment of the bidder.

11.27 Cyber Security Requirements

All the ICT assets shall be hardened as per the Hardening guidelines and industry leading practices. Remove all unauthorized software, utilities, and services. All required logs shall be configured and monitored. Following detailed requirements pertaining to the Cyber Security shall be fulfilled by the bidder:

11.27.1 Network Security

Security Features	Detail Requirement
Switches	• User authentication and password management • Security settings on different management interfaces (physical and logical) • SNMP configuration • Access controls Use of logging and monitoring • Configuration to defy common security attacks like IP spoofing, ICMP redirects • Delegation of privileged use in accordance with job function Session management • Configuration of VLANs and associated protocol • Security Controls around port security, Spanning Tree protocol, VLAN Trunking protocol etc. • Updated version of IOS / patches
Routers	• User authentication and password management • Security settings on different management interfaces (physical and logical) • SNMP configuration • Use of logging and monitoring • Configuration to defy common security attacks like IP spoofing, ICMP redirects • Delegation of privileged use in accordance with job function Routing protocols configured and appropriate security settings • Review of access lists for different network segments (to different outside networks) • Updated version of IOS / patches
Firewalls	• Placement of firewall within the network policies and rule sets • Authentication & Authorization • Auditing, logging, monitoring, alerting mechanism • Password control and security controls for administrative / management interfaces • Configuration to defy commonly known security attacks • Configuration of access control and priority of traffic flow Allowed inbound and outbound services • Service proxies, circuit-level gateways, and packet filters Surrounding firewall security issues • Domain name services • Router protection and participation in firewall functionality VPN configuration and encryption • Updated version of OS / patches
Intrusion Prevention /Detection Systems	• Placement of devices • Authentication and Authorization • Auditing, logging, monitoring and alerting mechanism • Incident management

Security Features	Detail Requirement
Network Monitoring Software	• Installed to monitor critical servers of the entire network including the branches for sizing etc. • It should monitor the network components of LAN & WAN, Fault Management, Performance Management of the network and the servers, Inventory Management, automatic discovery of network components etc. • Functional capabilities and effectiveness of NMS software need to be reviewed and audited.
Network Architecture Security	• Segregation of network into various trusted zones, route path and table audit • Security measures at the entry and exit points of the network • Analysis of Load balancing mechanism • Optimization across inter V-LAN routing
Email Security	• Mail server application hardening • Ensure protection from malware • Mail server and content security • Mail server related network infrastructure security • Mail client security • Mail server administration
Digital Signature and Cryptography	• Define policy on the use of cryptographic controls • Robust key management and acquisition process of Digital Signature • Secure Usage and management of Digital Signature
Wi-Fi Security	• Secure authentication mechanism through unique user id password • Security policies shall be deployed at various levels based on the requirement • For Wi-Fi –Access - DoT Guidelines and PEAP (Protected Extensible Authentication Protocol), 3rd Generation PartnershipProjects for Wi-Fi Networks

11.27.2 OS DB Security

Security Features	Detail Requirement
OS Security Configuration	Windows Access Management User and group privilegesSystem and user policies Remote access polices Logging mechanism Domain architecture and trust relationshipsShare permissions and definitions Service packs and hot-fixes System services and applications Policies and procedures that govern its usePatch and Antivirus update Registry settings, including registry security permissionsProfiles and log-in scripts UNIX Access control Trust relationships Password strength and shadowing Network Information System (NIS) Network File System (NFS) Control over Cron jobs System start-up files SetUID/SetGID programs Buffer overflow vulnerabilities User environment Security patches Policies, procedures and standards
Database Security Configuration	Access controls and allocation of privilegesUsage of privilege accounts Auditing, logging and monitoringDBMS configuration Operating system access and user managementRoles Allocation

Security Features	Detail Requirement
	Backup and Recovery

11.27.3 Application Security

Security Features	Detail Requirement
Application Testing	Security testing shall be conducted pre-deployment –functionality, usability, scalability and security Regular application audit post deployment- functionality,usability, scalability and security
Backup	Data storage ,backup and restoration as per requirement
Logging & Audit Trail	Logging based on data criticality Audit trail maintenance and availability as per requirement
Database Maintenance	User Access control Appropriate policy to monitor deviation -Database activitymonitoring (DAM) tools
Application Access Management	Need based access management Regular access review Controlled usage of generic and system password
Password Management	Strong password management features based on criticality of application
Interface security	Encrypted and authenticated data exchange
Encryption	Strong encryption mechanism based on data classification
Patch Management	Regular security patch updates and hotfixes :Four Phase approach - Measurement and Assessment, Identification and Classification, Estimation and Preparation and Implementation
Software LicenseCompliance	Policy and procedures followed for software license compliance Actions taken against non-compliance to software licensing
Web Application Security – OWASP Tope 10 2013	Threat analysis where appropriate tests targeting criticalapplications, application modules or access methods areidentified Scan each web application for known vulnerabilitiesAdvanced Manual Testing
Configuration Security	Minimum Baseline Security Standards (MBSS) for all application
Application Load Testing	Identify application's maximum operating capacity as well as any bottlenecks
Change Management	Standardized, efficient and prompt handling of all changes tominimize the impact of change-related incidents upon servicequality
SDLC Compliance	Ensure that high quality systems are delivered, provide strong management controls

11.27.4 Data Security

Security Features	Detail Requirement
Information Asset Management	Maintain asset inventory Maintain data classification and labelling– Restricted, Confidential,Public and Internal Disposal and Physical transfer of asset should be controlled andrecorded
Data Privacy	IT Act 2000 clearly defines data privacy and that has to be strictlyadhered to Reasonable security practices and procedures for sensitive personal dataor information Biometric information capture, stored and transmitted to follow AadharAct 2016 Protection of cardholder data , compliance to PCI DSS is mandatory
Data Exchange	Security features across data in transit (password protection, device protection, network protection) Data exchange with external entity as per the legal and regulatoryguidelines Security of data exchanged within internal entities (e.g.. edge device to aggregator) As per MoUD requisite, all message exchange between variousapplications should be fully encrypted and authenticated
General Security	Authentication capabilities: All systems should require a username and password to access functionality, at a minimum. To enhance authentication capabilities, The solution should support strong authentication mechanisms (one-time passwords, certificate- or biometric-based authentication, etc.).
	Authorization capabilities: All functionality should require and enforce properpermissions before performing any actions
	Automatic and secure update of software, firmware, etc.: Software/firmware update mechanisms should be available, andupdates should be delivered in an automatic and secure way
	Auditing, alerting, and logging capabilities: All systems should provide mechanisms for auditing and loggingsecurity events. Logs must also be saved securelyagainst tampering.
	Anti-tampering capabilities: Devices should have a mechanism to prevent tampering byunauthorized sources
	No backdoor/undocumented/hardcoded accounts: Removing or disabling these accounts should be enforced in the service-level agreement (SLA) to ensure vendors will comply.
	Only basic functionality should be enabled by default, and the restshould be enabled depending on the organization’s needs
	Fail safe/close: In the case of a system malfunction or crash, the system should remainsecure and security protections remain enforced.
	Solutions should come with a secure configuration by default.

Security Features	Detail Requirement
Electronic card data Security	• The payment gateway provider should be Level 1 compliant with the Payment Card Industry Data Security Standard (PCI DSS) and also offer built-in security such as tokenization
	• They should have proper encryption on all payment pages, have solid authentication procedures (such as 3D secure pin, One time password authentication etc.) use API's to securely post data from the website etc.
	• Electronic signatures should be used by each party involved in the transaction
	• Communication path used to communicate between the parties shouldbe encrypted and secured protocols should be used.
	• Confidentiality and non-accessibility of the transaction from the internet
	• Password authentication of all users
	• Conformation to legal and regulatory requirements

11.27.5 IoT Device Security

Security Features	Detail Requirement
Device Identity Management	Consolidate, organize, and manage identity relationships for people, devices, and sensors using digital certificates
IoT Network Security	• MUST support standards-based secure protocols that provide authentication, data confidentiality, data integrity, and replay protection to safeguard any sensitive data in transit. • MUST support a cryptographic authentication mechanism (e.g., public key) for communication between peers • MUST support proper validation of peer credentials. • If they transmit sensitive data, then non-secure protocols MUST require an authorized administrative action to enable. • MUST prevent unauthorized traffic from traversing different interfaces. • Physical interfaces MUST satisfy be disable or MUST satisfy allow only authorized access and be invulnerable to attack. • The Network Operator or IoT Service Provider should perform an assessment of the network services that are needed to enable the IoTService (voice, data, SMS, etc.) both now and in the future. • Based upon this assessment the Network Operator should operate onthe "principle of least privilege" and provision the IoT Service Provider's subscriptions with only those services required for the specific IoT Service. • Network Operators should implement secure subscription management processes for IoT subscriptions that enable critical IoTServices • Network Operators should identify the UICCs used for IoT Services from traditional UICCs used to provide traditional services and, if required by the IoT Service Provider, segregate these appropriately. • Recommendations for IoT using LPWA technologies: o Whether an IP network layer is implemented over the linklayer. o Whether a secure element is present, and if so, whether it is removable. o To what extent data integrity is guaranteed.

Security Features	Detail Requirement
	○ Whether any algorithms or key lengths supported by the technology are black-listed or should be deprecated (such as64-bit encryption keys for GPRS). • For 3GPP LPWA Network Technologies: ○ Whether Remote SIM Provisioning (RSP) is supported. ○ Which integrity algorithms (EIAx/GIAx) and confidentiality algorithms (EEAx/GEAx) are implemented and permitted. • For LoRaWAN: ○ Whether ABP (Activation By Personalisation) or OTAA (Over-The-Air Activation) is implemented, and for OTAAwhether an AppKey may be shared between devices. • For All LPWA Devices: ○ What form (if any) of security certification has beenundertaken
IoT Encryption	• Encrypting data at rest and in transit between IoT edge devices and back-end systems using standard cryptographic algorithms, helping maintain data integrity and preventing data sniffing by hackers • IoT encryption must be accompanied by equivalent full encryption key lifecycle management processes
IoT PKI	• Digital certificate and cryptographic key and life-cycle capabilities, including public/private key generation, distribution, management, and revocation • Digital certificates securely loaded onto IoT devices at the time of • manufacture and then activated/enabled by third-party PKI softwaresuites
IoT security analytics	• IoT security analytics will increasingly be required to detect IoT-specific attacks and intrusions that are not identified by traditional network security solutions such as firewalls
IoT Authentication	• MUST support authentication for administrative access. • MUST support strong authentication for all users including administrators. • MUST require the configuration of unique identification and authentication credentials on first use. • Authentication data MUST be protected against unauthorized disclosure, modification (e.g. FIPS140-2 strength of authentication mechanism requirements and/or OWASP IoT Top 10 authenticationrequirements). • MUST prevent users from escalating privileges without administrative authorization. • MUST prevent enumeration of user accounts.
IoT Device Physical Security	• MUST incorporate visible tamper evidence mechanisms. • MUST support mechanisms to prevent unauthorized access to internal components. • MUST support tamper detection mechanisms that sends alert, zeroizeprivate keys and disable the device itself.
Alert & Logging	• MUST support sending an alert on any attempts to upgrade. • Support sending an alert on any attempts to gain administrative access. • support sending an alert when tampering or attack has been detected. • MUST support sending an alert when changing from secure communication and/or interfaces to non-secure communications and/or interfaces.

Security Features	Detail Requirement
	• support sending an alert when changing any setting related to the handling of sensitive data • support sending an alert upon being reset to factory defaults. • Alert messages MUST be time-stamped.

Platform Security	• MUST be invulnerable to exploits known within the information security community.
	• MUST NOT be rendered inoperable by denial of service attacks against which it is capable of defending per industry standard practices.
	• MUST support a secure boot mechanism including:
	  ○ a non-modifiable boot loader,
	  ○ verification of the integrity of software/firmware and criticalconfiguration data,
	  ○ a manual administrative initiated verification of the integrity of software/firmware and critical configuration data.
	• MUST support a secure remote upgrade mechanism including:
	  ○ authorized initiation and activation of upgrade
	  ○ validating authentication and integrity of signed code,
	  ○ supporting a rollback in the event of a failed upgrade,
	  ○ maintaining configuration and stored data after upgrade,
	  ○ reporting version data on authorized administrative request.
	• MUST support a clock with the following attributes:
	  ○ supports synchronization with an authorized time source,
	  ○ maintains accuracy within 1 second per day,
	  ○ maintains time in the absence of power or synchronization source

11.27.6 Cloud Security

Security Features	Detail Requirement
Cloud Setup	• Deploy public facing services in a zone (DMZ) different from the application services. The Database nodes (RDBMS) should be in a separate zone with higher security layer • Security rules defined as part of firewall to restrict access • Cloud offering should have built-in user-level controls and administrator logs for transparency and audit control • The Primary DC and the DRC should be in different city / state
Network	• VPN gateway for controlled access • Appropriate security rules to encrypt outward data flow • Enable IDS, IPS, API Gateways and ELB logs for any activities, accessand exceptions carried out in the cloud setup • Configure database logs to be routed as part of the Logging VPC setup
API Gateways	• Digital Certificate to secure access to API Gateways • Encrypted data flow between external API and internal API Gateway • Enable logging and monitoring

Security Features	Detail Requirement
Web Services	• Web Application Firewall to ensure perimeter security solution for the web services • Host IPS on all the Web servers • Web servers configured as per the CIS hardening guidelines and baseline security requirements • Enable logging and monitoring
OS and DB	• Segregate application access between applications hosted, internal infrastructure and external traffic • Role based access • Hardening of database instances as per the CIS baselines configuration guidelines in the cloud setup • Enable logging and monitoring
Secure Code	• Regular Secure Code Review for Cloud Applications
Guidelines for Government Departments On Contractual Terms Related to Cloud Services (MeitY) dated 31/03/17	• Certification/Compliance: Provisional Empanelment of Cloud Service Offerings CSPs facilities/services shall be certified to be compliant to thefollowing standards: ISO 27001, ISO 27018, ISO 20000-9, ISO/IEC 20000-1 & PCI DSS - • The CSP/Service Provider shall meet all the security requirements indicated in the IT Act 2000
	• Encryption shall be implemented based on data classification (for confidential data)
	• Incident management to be managed by SI
	• Data backup - implement data encryption at rest using departments managed keys, which are not stored in the cloud
	• CSP to inform all security breach incidents to Smart City management
	• SLA with CSP to ensure data confidentiality
	• SI to cover sub-contractual risk and CSP to abide by all the infrastructure availability SLA
	• Location where data resides shall be as per terms and conditions of the "Empanelment of the Cloud Service Provider"
	• E-Discovery to be included as clause in SLA with CSP
	• Audit: ensure that the CSP's services offerings are audited and certified by • STQC/MeitY
	• Exit Management Plan shall include - Transition of Managed Services& Migration from the incumbent cloud service provider's environment to the new environment shall follow all security clauses
	• Performance Management of CSP shall be done through SLA
	• Dispute Resolution: Escalation procedure shall be set in the SLA. • Unresolved cases move to mediator, expert panel and then referred toArbitration
Data Security	• The Data Center Facility shall at a minimum implement the security toolset: Security & Data • Privacy (Data & Network Security including Anti-Virus, Virtual Firewall, Single Signon, UTM, One Time Passwords, Multi Factor Authentication, Log Analyzer / Syslog, SSL, DDOS Protection, HIDS /NIDS, Rights Management, SIEM, Integrated Vulnerability Assessment, SOC, Private Virtual Zones, Web Application Filter for OWASP Top 10 protection,

Security Features	Detail Requirement
	Data Privacy, Data Encryption, • Certifications & Compliance

11.27.7 Cyber Security Governance

Security Features	Detail Requirement
Third Party Security	
Vendor SLA	• An agreement about the specific security features of the product. There should be a clear understanding that the absence or malfunction of these features could have legal and/or financial consequences for the vendor.
	• An agreement that the vendor will provide continuous (24/7/365) 'reliability tested' support for security incidents related to its products. There should be a defined and limited timeframe during which vendors must provide solutions when security flawsare found. There should be a clear understanding that non- compliance could have legal and/or financial consequences to the vendor.
	• An agreement that vendors prove their compliance to security requirements through third-party testing, certifications, etc.
Vendor Vulnerability record	• Security maturity (how long the vendor has been concerned about security exposure)
	• How does the vendor protect its own infrastructure from attacks and intellectual property leaks?
	• Does the vendor implement policies and procedures that require independent entities to test its infrastructure for security flawsand backdoors?
Security Features	Detail Requirement
	• Does the vendor run regular independent code reviews and penetration tests on its products, networks, and systems?
	• How does the vendor protect details about its clients, such as design details, product lists, and client contact information?
	• Does the vendor enforce supply-chain cyber security to prevent the delivery of products with malware, backdoors, etc.?
	• Does the vendor have a public security vulnerability disclosure and reporting policy and proper contact channels to get the vulnerability reports?
	• Does the vendor have support teams for security issues/incidents, such as a Computer Emergency Response Team (CERT), Computer Security Incident Response Team (CSIRT), online support, etc.?
Vendor SDLC	• How does the vendor test its products and simulate large-scale environments to verify its product's usability?

	• Does the vendor have a Secure Development Life Cycle (SDLC) program? If so, how long has it been running?
	• Does the vendor adequately protect its development environment and intellectual property from spying or manipulation?
Controlled Sub-Contracting	• Sub-contracting based on all agreed terms Risk coverage by the contractor
Performance monitoring	• Review of mechanism for calculating performance metrics • As per MoUD requisite, ensure vendor compliance to remove any backdoors, undocumented and hard cored accounts
People -Physical & Environmental	
Physically segmented Zones	 Bifurcation of segment as per functionality and dataclassification
Physical Entry Control	• Controlled access to secured area –biometric access Periodic access review Guarded/restricted visitor access Limited Identification of the Information Processing Facility
Environmental Control	• Protection from fire, electrical and water damage Periodic check and review
Equipment Maintenance	• Routine maintenance and reporting of all IT equipment

Security Features	**Detail Requirement**
Power Supply	• Uninterrupted power supply ensuring continuity to business
Surveillance	• Trained security guards and CCTV cameras Protection of Assets from theft
BCP/DR	• Formal BCP/DR plan reviewed at a regular interval • Is the BIA and RA is performed to identify RTO and RPO? Planned DR testing
Product Management	
Integration	• Evaluate the security impact when integrating a new product to the current system.
	• Deploy specific measures to ensure security requirements for the integration of new products (i.e. network segregation, monitoring of specific KPI, etc.).
Hardening	• Non-production services are not expected to be reachable from a network perspective and solutions processes should be running in isolated sandboxes that are available only to restricted users (blocking permission escalation attacks if successful).

Certification	• In smart cities, certification authorities could be available to evaluate products and solutions on behalf of Service Provider. • These certifications could be used to support decision-making, but the testing scope and procedures should be verified. • They should not be used exclusively, as the results could be wrong or misleading.
Operational security verification and validation	• Validate security processes are running correctly and that the right audit data is being captured
Operation and Maintenance	
Monitoring	Monitoring: • Service providers are expected to monitor the stability of the services, tracking any suspicious activity, abnormal behavior, performance hooks, or any other service-threatening events by regularly reviewing system audit logs and/or other available mechanisms
Patching	Patching: • Service Provider and vendors are expected to collaborate on deploying the latest security patches. • Patches should be deployed per the company's patch management policies, taking into account the urgency of the patches. • Patches are expected to be tested in the lab environment first. There are challenges associated with patching IoT devices when compared to traditional enterprise IT systems. Often it is the device firmware that must be updated. When doing so, make surethat the firmware update mechanisms deliver the updates in a secure manner–that is with encryption and a digital signature.

Security Features	Detail Requirement
Regular Assessment	Regular assessment and auditing: • Testing smart services is also expected to run continuously to verify service compliance with the applicable standards and security policies (i.e. make sure encryption remains turned on, authentication enabled, strong passwords set, security settings not changed, etc.). • Being ready to respond is imperative to protecting infrastructure. Testing services is especially relevant after applying new changesto the systems, where simulating a large-scale live environment might not be possible, and testing changes might only be possible in the production environment.
Logging	Protection of logging environment: • All logs should be safely transmitted and stored. • Logging should occur as close to the end-device as possible, although it may not be possible to collect or routinely forward data at some disadvantaged devices. • In these instances, maintaining situational awareness through data collection at IP propagators such as WiFi or other protocol routers, gateways, and standard network security devices should be evaluated.
Access Control	Access control • Appropriately monitoring who, when, and how someone has access to smart service systems is critical to prevent unplanned changes, tampering, or downtime, which are not acceptable in smart city environments.

Threat Intelligence	• Threat intelligence enables an organization to identify regional and worldwide occurrences, such as new, trending, common, and regional attacks. Armed with such information, an organization can update its security posture and parameters as needed to block attacks before they happen. • Cyber-threat intelligence could also be used on a country-level by the government, where certain traffic patterns and source locations could be blocked upon need on the regional Internet gateways, protecting all Service Provider within.
Reaction and Recovery	• It is important to create detailed procedure manuals or checklists that define compromised. This includes things like certificate revocation, key zeroization, and systems isolation and clean up, as well as how to follow up on the incidentin order to understand how the system was compromised and develop plans so that it will not happen again.
Implementation	
Secure Delivery	• It should have not tampered with, modified, etc. from the time it was shipped from the solution provider. • Binaries should be cryptographically signed, and devices should have not been tampered with.
Encryption	• All communications should be properly protected against unauthorized eavesdropping, interception, and modification. • Encryption keys must be well protected and kept in a safe place.

Security Features	**Detail Requirement**
Secure System administration	• Avoid using a single administrator system user to perform all actions on all systems. • Use different administrator users and passwords and grant granular permissions.
Set strong passwords	• Access to administration interfaces, functionality, etc. should require a user account with a strong password. • Passwords policy must be defined for password strength and duration validity. • To enhance authentication capabilities, use strong authentication mechanisms (one-time password, certificate- or biometric-based authentication, multifactor authentication, etc.) especially any technology that can impact public safety.
Disable unused functionality and services	• Some solutions have all functionality and services enabled by default. Disabling unused functionality and services reduces the attack surface and prevents possible attacks that abuse weaknesses in those functions and services.
Remove unnecessary user accounts	• Some solutions come with test/default accounts and passwords that could be used by unauthorized parties to access the systems,if these accounts are not removed. Specific accounts can be created for the implementation process, but these accounts mustbe removed after the solution is installed and not used for operation purposes. These accounts should be identified in the product and implementation documentations for easy identification and removal.
Enable auditing of security events	• Constantly monitoring audit logs will help to identify ongoing attacks and breaches.
Anti-tampering, anti-vandalism	• Devices should be protected against unauthorized physical access for modification, vandalism, or device stealing.
Testing	• Before implementing specific technology, the same model, version, etc. must have passed security testing.

	• Penetration testing is a recommended method for verifying the security of smart city products. When faced with real-world attacks, services could misbehave, leak data, or even crash.
Change Management	
Change Request	• Formal Change Management process shall be established, which covers all types of change-upgrades and modifications to application and software, modifications to business information, emergency 'fixes', and changes to the computers / networks that support the application.
	• Formal "Request For Change" form shall contain the following detail: Description of change, Change objective or reason for change & users affected
Change Impact Analysis	• Feasibility Analysis -a. Need for change, b. Impact of change, c. Priority of change should be conducted for all type of changes related to IT infra
Change Testing	• Changes shall be tested to help determine the expected results (for e.g., deploying the patch into the live environment)
Security Features	**Detail Requirement**
Change Implementation	• Changes shall be reviewed to ensure that they do not compromise security controls (e.g., by checking software to ensure it does not contain malicious code, such as a Trojan horse or a virus)
	• Changes to the application shall be performed by skilled and competent individuals who are capable of making changes correctly and securely and signed off by an appropriate business official.
Change Rollback	• Back-out positions shall be established so that the application can recover from failed changes or unexpected results
Change Monitoring and Verification	• the change shall be monitored for a few days to ensure that the change has not affected the regular business operations
Information Security Incident Management	
Information Security Incident	It defined as the act of (or the threat of) occurrence of non-compliance with the security policy, procedure that may result in: • Loss of confidentiality of information assets. • Compromise of integrity of information assets. • Denial of service. • Misuse of service, systems or information assets. • Damage to information assets
Incident Response Team (IRT)	• Notify IRT in a timely manner of any incident detected/reported that require immediate attention. • Record incident details in preliminary incident report • Initial Diagnosis, Classification and Preliminary Support – IT helpdesk Team • Investigate and analyze incident • Ensure that data and information found during investigation is not tampered • Resolve and Report incident • Incident reporting to CERT-IN, *NCIIPC (National Critical Information infrastructure Protection Centre)*
Anti-virus and Patch management process	
Assessment and Identification	• Derive list of security threats and vulnerabilities Check relevance of new software updates

Estimation and Preparation	• testing the software update in a production-like environment • Taking approval for patch implementation
Implementation & Reporting	• Deployment of the approved patches • Monitoring and reporting on the progress of deployment
Backup Management	
Backup and Recovery	• There shall be documented backup and recovery procedures for the following: a. Source codes and/or executables of Application software b. Data files of all application software c. End-user document files like Microsoft Office documents etc. d. Electronic mail e. System software's like operating system, RDBMS etc. f. Parameter and configuration files of networks and network devices

Security Features	Detail Requirement
	• Combination of full and incremental backup or full backup shallbe taken based on the criticality of data, servers
Backup scheduling & media	• Type and frequency of backup and type of backup media to be used shall be depend on: Volume of data, Criticality of data and Recovery time constraints
Type of backup solution	• Automated backup or Manual Backup
Backup logs	• Backup logs shall be reviewed to ensure verification of successful completion of backups.
	• Backup logs shall be stored for a period of 60 days
Security of Backup Process	• Data on Backup media (tapes, disks etc.) shall be secured against unauthorized access. • Backup media shall be secured against environmental and physical threats. • For all applications, a copy of the backup shall be stored offsite.
Recovery Testing	• Recovery testing shall be done periodically for all and those applications for which synchronized data backup at DR site is not available to ensure that data can be recovered from the backup media. • Frequency of recovery testing shall be at least every six months.
Backup Failure	• In case of failure of backup incidence shall be raised and incident management process shall be followed
Technology Disposal	
Secure Data disposal	• Securely erase data on systems storage. This is a good measure to apply, but destruction of storage may be required to assure the safe, quick disposal of critical data.
Secure device disposal	• Vendor replacement is also important. While many Service Provider think about the disposal of data correctly, a vendor's maintenance and support personnel could easily access smart service systems to perform regular maintenance activities. If they replace hardware, the vendor could repurpose it at other clients or dispose of it without appropriate security measures. Hardwarethat is removed from live environments by support personnel is not usually protected. Vendors are expected to provide secure technology disposal as part of their services and maintenance contract with the client organization.

Avoid reuse	• Avoid repurposing technology by the same organization or third parties. It could leak sensitive design, client, password, or cryptographic information, which could create a threat to production services.

12. DC DR on Cloud

The Scope of work includes but not limited to,

- Understanding the existing Infrastructure, setup, software, applications of GSCDL and planning for Cloud DC-DR solution
- SELECTED BIDDER must ensure that cloud virtual machine is into separate network tenant and virtual LAN.
- SELECTED BIDDER must ensure that cloud virtual machines are having private IP network assigned to cloud VM.
- SELECTED BIDDER must ensure that all the cloud VMs are in same network segment (VLAN) even if they are spread across multi datacenters of CSP.
- In case of scalability like horizontal scalability, the SELECTED BIDDER should ensure that additional require network is provisioned automatically of same network segment.
- SELECTED BIDDER must ensure that GSCDL gets ability to map private IP address of cloud VM to public IP address as require from portal of CSP.
- SELECTED BIDDER must ensure that public IP address of cloud VMs remains same even if cloud VM gets migrated to another datacenter due to any incident.
- SELECTED BIDDER must ensure that public IP address of cloud VMs remains same even if cloud VM network is being served from multiple CSP datacenters.
- SELECTED BIDDER must ensure that the public network provisioned for cloud VMs is redundant at every points.
- SELECTED BIDDER must ensure that cloud VMs are accessible from GSCDL private network if private links P2P/MPLS is used.
- SELECTED BIDDER must ensure that there is access to cloud VMs if there is a requirement to access it using IPSEC/SSL or any other type of VPN.
- SELECTED BIDDER should ensure that cloud VM network is IPV6 compatible.
- SELECTED BIDDER should have provision of dedicated virtual links for data replication between their multiple datacenter in order to provide secure data replication for DR services.
- SELECTED BIDDER should ensure use of appropriate load balancers for network request distribution across multiple cloud VMs.

12.1 DR Plan and Implementation

Disaster Recovery as a Service

- SELECTED BIDDER is responsible for Disaster Recovery Services so as to ensure continuity of operations in the event of failure of primary data center meet the RPO and RTO requirements.
- RPO should be less than or equal to 15 minutes i.e. the replication cycle should run at maximum 15 minutes.
- RTO shall be less than or equal to 2 hour.
- During the change from Primary DC to DR or vice-versa (regular planned changes), there should not be any data loss.
- The Primary DC-Cloud and the DR-Cloud should be in different seismic zones.
- CSP should provision VM's for both DC and DR. GSCDL shall pay the CSP Vendor as per 'Pay as you use' model on hourly basis for the resources used at the Cloud-DR site.

- During normal operations, the Primary Cloud Data Centre will serve the requests. The Disaster Recovery Site will not be performing any work but will remain on standby.
- During this period, the compute environment for the application in DR shall be available on demand basis for a functional DR and minimum compute if required, as per the solution offered. The application environment shall be installed and ready for use.
- DC Data shall be replicated (Active-Active) on an ongoing basis at Cloud-DR, as per designed RTO/RPO and replication strategy, data consistency and integrity should be maintained
- Database should be in Active mode at DC and Passive mode at DR, data consistency and integrity should be maintained.
- In the event of a site failover or switchover, DR site will take over the active role, and all the requests will be routed through that site. Application data and application states will be replicated between data centres so that when an outage occurs, failover to the surviving data centre can be accomplished within the specified RTO. This is the period during which the Compute environment for the application shall be equivalent to DC.
- The installed application instance and the database shall be usable and the same SLAs as DC shall be provided. The use of this Full Compute DR environment can be for specific periods during a year for the purposes of DC failure or DR Drills or DC maintenance.
- The security shall be for full infrastructure i.e. Cloud-DC and Cloud-DR Website and live application (both external and internal) should be routed seamlessly from Cloud-DC site to Cloud-DR site.
- The SELECTED BIDDER shall conduct DR drill one in every six months, of operation wherein the Primary DC has to be deactivated and complete operations shall be carried out from the DR Site.
- However, during the change from DC to DR-Cloud or vice-versa (or regular planned changes), there should not be any data loss.
- The SELECTED BIDDER shall clearly define the procedure for announcing DR based on the proposed DR solution. The SELECTED BIDDER shall also clearly specify the situations in which disaster shall be announced along with the implications of disaster and the time frame required for migrating to DR. The SELECTED BIDDER shall plan all the activities to be carried out during the Disaster Drill and issue a notice to the Department at least 15 working days before such drill.
- RPO monitoring, Reporting and Events Analytics for the Disaster recovery solutions should be offered as part of the offering.
- Any lag in data replication should be clearly visible in dashboard and alerts of same should be sent to respective authorities.
- Training should be provided to the staff members and System Administrator on DR.
- Services provider should provide the solution document of DR.
- Selected bidder should have proper escalation procedure and emergency response in case of failure/disaster at DC.
- Selected bidder shall provide support for all server maintenance activities. This would include periodic health check, on-demand troubleshooting, etc. from certified vendors.
- ITIL processes named problem, change, incident & configuration will be followed by selected bidder at DR site.
- Selected bidder shall provide Disaster Recovery services during the event of Disaster.
- The Selected bidder shall configure all the components and sub-components for end-to-end user access to all Windows applications/services.

- The Selected bidder will have to demonstrate the DR site to run on thirty percent capacity for proving successful implementation of the DR site.
- GSCDL reserves the right, on its own or via a third party auditor, to conduct overall testing at any point of time for the services delivered by the selected bidder.
- The selected bidder shall make provisioning of requisite software licenses, Database licenses and other required monitoring software, tools for IT setup at DR site
- The selected bidder shall undertake installation and configuration of operating systems, databases, storage solution and replication mechanism for all in-scope business application systems.
- The selected bidder shall undertake installation and configuration of any other specialized applications/ software solution/Hardware solution required for the Disaster Recovery Setup.
- The selected bidder would be solely responsible for implementation of all applications at DR site. All costs including licenses for application, OS, replication tools or databases if any shall be borne by the selected bidder
- Automated switchover/ failover facilities (during DC failure & DR Drills) to be provided and ensured by selected bidder. The switchback mechanism shall also be automated. The selected bidder shall also provide a tool/ mechanism for GSCDL Cloud DC to trigger DR switchover (CSP to deliver Switch Over and Switch back)
- Selected bidder shall provide support for the development of detailed activity plans for recovery for all systems.
- Selected bidder shall provide support for the development of a detailed disaster recovery plan. This plan document will contain steps/procedures to switch over services to DR site in the event of invocation of disaster at DC site. Selected bidder shall also document steps for restoring services from DR site to DC site.
- Selected bidder shall provide support with the development of detailed operating manuals for the implemented replication solution from system administrator's perspective.

12.2 Testing

Following cloud resource deployment/provisioning, the testing of the same at Cloud DC DR site becomes very important. Therefore the service provider must perform following testing:

Infrastructure testing - The bidder should perform various testing procedures listed below on infrastructure (server, storage and network infrastructure) provided at Cloud site. Indicative list of test parameters are as follows

- VM testing
- Storage/Disk IO testing.
- Network throughput and latency testing
- CPU and RAM benchmarking testing
- Read/Write latency testing
- Data Replication Testing
- Firewall policy and configuration testing
- Data Integrity Testing, Reverse Replication Testing and Switch over testing: The Cloud service provider will facilitate the FMS vendor and the application vendor of GSCDL to carry out these/ such testing, whenever required.

The service provider shall maintain and manage the system (cloud solution) for the entire period of the contract and shall be fully responsible for ensuring adequate CPU processing power, memory, storage, network, internet bandwidth and monitoring of the cloud services for optimum performance of the entire Cloud solution conforming to SLAs as per the Contract. The successful bidder has to provide O&M support to maintain SLAs. During the 36 months of contract, if the successful bidder is unable to comply with the support terms as mention in later section, the bidder will have to a pay a Penalty as specified under the SLA of this project. Post implementation support would also include support during scheduled DR drills (once every 6 months, which shall be performed by cloud provider of GSCDL), during regular operations while only replication is taking place, in disaster scenario when DR is active and operational, and during switchover and switchback.

12.3 Security Audit

The service provider shall conduct vulnerability and penetration test (to be conducted by a third party testing agency which should be CERT-IN empaneled and which is approved by GSCDL) on the proposed Cloud solution in every quarter and reports should be submitted to GSCDL. Corrective action should be taken by the service provider within 3 months from the date of submission of the report. Compliance review should be done within 4 months from the date of submission of the report. Any non-compliance in the reports may lead to penalty clauses. The service provider needs to update the system in response to any adverse findings in the report, without any additional cost to GSCDL. GSCDL may also depute auditors to conduct security check/ vulnerability test/penetration test.

Third party Vulnerability Testing/ Security Audit as per CERT-In/ Meity Guideline is mandatory for all Websites/ Web Portals/ APIs/ WebSocket/ Payment gateways (if available) should be ensure by the successful bidder

12.4 Cloud Management Portal

The MSI should provide Cloud Management Portal / Self provisioning portal including but not limited to,

- User Roles & Rights : GSCDL should be able to create users based on roles & rights.
- Monitoring Reports
- SLA Reports
- Backup Reports
- VM Status report
- Provisioning /De-provisioning of VM's
- Creating templates for VM's
- Able to make changes in configurations

13. Responsibility Matrix

Sr No	Key Activities	Successful Bidder	GMC	GSCDL	Network Vendor	Electricity Providers	other utilities	Other Departments	PMC	Existing ICT vendor at GSCDL
1	Operation and Maintenance of IT, Non IT infrastructure and Applications	R/A	C	C	I	I	I	I	C	I

Sr No	Key Activities	Successful Bidder	GMC	GSCDL	Network Vendor	Electricity Providers	other utilities	Other Departments	PMC	Existing ICT vendor at GSCDL
2	SLA and Performance Monitoring	R/A	C	C	I	I	I	I	C	I
3	Logging, tracking and resolution of issues.	R/A	C	C	I	I	I	I	C	I
4	Application enhancement	R/A	C	C	I	I	I	I	C	I
5	Patch & Version Updates	R/A	C	C	I	I	I	I	C	I
6	Helpdesk services	R/A	C	C	I	I	I	I	C	I

Note: All decisions will be taken by GSCDL which will be abided by all the stakeholders in the above matrix.
R/A = Responsible/Accountable
C = Consulted
I = Informed
RACI Matrix for Cloud services

The roles of the stakeholders shall change over a period of time as the project will evolve from design to implementation and enter the operations phase. With this background, is given below The RACI matrix for various activities in the design & implementation phase and operational phase of the project is as given below:

Sr No	**Key Activities**	**Selected Bidder/Cloud Service Provider**	**Application Management Vendor(s)**	**GSCDL/ GMC**
1	Installation/End Point Protection of VM's Patch & Release management at Infrastructure and Operating System Level	R/A	I	C
2	Installation of Websites code/ Application code	I	R/A	C
3	MPLS Connectivity between GSCDL – Cloud DC and GSCDL Cloud DR site	C	I	R/A
4	Availability of Infrastructure	R/A	I	I
5	Management of Application/Database, Patch & Release management at Application Level	C	R/A	R/A
6	ILL Connectivity for Cloud DC and Cloud DR	R/A	I	I
7	Infrastructure testing	R/A	I	I
8	Application Testing	C	R/A	C/I
9	Data Integrity Testing	R/A	R/A	I
10	Cloud Solution Functional Testing	R/A	I	R/A
11	Replication Testing between Cloud DC – Cloud DR	R/A	R/A	I
12	Reverse Replication Testing between Cloud DR – Cloud DC	R/A	R/A	I

Sr No	Key Activities	Selected Bidder/Cloud Service Provider	Application Management Vendor(s)	GSCDL/ GMC
13	DR Readiness (Failover & Failback)	R/A	A	A
14	DR Drill –Switchover & Failback	R/A	R/A	A
15	DNS Management	R/A	I	A/C
16	Cloud Solution (DC and DR) Maintenance	R/A	I	I
17	Cloud Service Provisioning	R/A	I	I
18	Training to GSCDL Users as per the training requirements mentioned in the RFP	R/A	I	I
19	24x7x365 Support, Cloud service Provisioning, deprovisioning, etc.	R/A	I	C
20	Maintaining the helpdesk for Cloud components	R/A	I	I
21	Security Audit VA & PT /Load Test of Network & Applications	R/A/C	R/C	C/I
22	Audit of Infrastructure	R/A	I	I
23	Backup Monitoring, Scheduling, Retention & Restoration	R/A	I	C/I

14. Payment Terms and Milestones

The Operations and maintenance phase will start as soon as Work Order is issued to the selected bidder. The selected bidder will be required to adhere to the SLA and provide support of warranty and O&M for the remaining project period after implementation/Go-Live. The successful bidder shall be responsible for warranty services from licensers of products included in the systems. The successful bidder undertakes to ensure the maintenance of the acceptance criterion/standards in respect of the systems during the warranty period.

The payment schedule for the project is as given below.

Sr No	Project Activity	Deliverables	Payment Terms
1	Operation and Maintenance	All project locations in working condition (after satisfactory inspection)	Equal Quarterly Payments
		Quarterly SLA compliance reports	
		Quarterly Preventive Maintenance reports	
		Quarterly Configuration change reports	
		Quarterly location wise Inventory reports	
		Other reports as desired by the client	

Note: The taxes would be paid at the prevalent rates. Payment shall be done after deduction of any penalties calculated for breach of SLAs.

The selected bidder once onboarded (on issuance of work order) must raise invoices only for locations/components which are functional. The invoice submitted must deduct the amounts as quoted in the BoQ of locations / components which are non functional. In case such deductions are not carried out by Selected Bidder during invoicing, then GSCDL reserves the right to deduct such amounts. Authority's decision in this regard would be final.

It is also to be noted by the bidder that at the time of submission of the invoices copy of the attendance sheet, all other required documents if asked by the client need to be submitted by the bidder. If the bidder fails to submit the same, the authority reserves the right to withhold the payment of the bidder.

Authority shall make payments to SELECTED BIDDER at the times and in the manner set out in the Milestones and Payment Schedule for Operations and Maintenance a subject to the penalties as per SLA calculation. Authority shall make all efforts to make payments to SELECTED BIDDER within 45 days of receipt of invoice(s) and all necessary supporting documents. No interest will be payable.

All payments agreed to be made by Authority to SELECTED BIDDER in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable, if any, and Authority shall not be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services.

No invoice for extra work/change order on account of change order shall be submitted by SELECTED BIDDER unless the said extra work/change order has been authorized/approved by the Authority in writing

In the event of Authority noticing at any time that any amount has been disbursed wrongly to SELECTED BIDDER or any other amount is due from SELECTED BIDDER to the Authority, the Authority may without prejudice to its rights recover such amounts by other means after notifying SELECTED BIDDER or deduct such amount from any payment falling due to SELECTED BIDDER. The details of such recovery, if any, shall be intimated to SELECTED BIDDER. SELECTED BIDDER shall receive the payment of undisputed amount under subsequent invoice for any amount that has been omitted in previous invoice by mistake on the part of the Authority or SELECTED BIDDER.

All payments to SELECTED BIDDER shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under any law, rule or regulation. All costs, damages or expenses which Authority may have paid or incurred, for which under the provisions of the Contract, SELECTED BIDDER is liable, the same shall be deducted by Authority from any dues to SELECTED BIDDER.

All payments to SELECTED BIDDER shall be made after making necessary deductions as per terms of the Contract and recoveries towards facilities, if any, provided by the Authority to SELECTED BIDDER on chargeable basis.

This section is to be agreed by the selected bidder as the Service Levels and key performance indicator for this engagement. The following section reflects the measurements to be used for tracking, monitoring and reporting of performance on a regular basis and imposition of penalties for non-performance as per the terms of this RFP.

The purpose of this section is to define the levels of service which shall be provided by the BIDDER for the duration of the contract. Service Level Agreement (SLA) shall become the part of contract between client and the BIDDER. The BIDDER has to comply with Service Levels requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this contract. The BIDDER has to supply appropriate software/hardware/ automated tools as may be required to monitor and submit reports of all the SLAs mentioned in this section.

For purposes of the SLA, the definitions and terms as specified in the document along with the following terms shall have the meanings set forth below:

- **"Total Time" -** Total number of hours in the quarter being considered for evaluation of SLA performance.
- **"Uptime"** – Time period for which the specified services/ outcomes are **available** in the quarter being considered for evaluation of SLA

- **"Downtime"**- Time period for which the specified services/ components/ outcomes are **available** in the quarter being considered for evaluation of SLA
- **"Scheduled Maintenance Time":** Time period for which the specified services/ components with specified technical and service standards are not available due to scheduled maintenance activity. The BIDDER is required to take at least **10 days** prior approval from client for any such activity. This would be allowed in off peak hours- generally from midnight for a maximum of 4 hours and would be granted once in a quarter and exclude festive timings etc.
- **"Incident":** Any event / abnormalities in the service being rendered, that may lead to disruption in normal operations and services to the end user.
- **"Response Time"**: Time elapsed from the moment an incident is reported in the Helpdesk over phone or by any applicable mode of communication, to the time when a resource is assigned for the resolution of the same.
- **"Resolution Time":** Time elapsed from the moment incident is reported to Helpdesk either in person or automatically through system, to the time by which the incident is resolved completely and services as promised are restored.

The bidder has to provide reports for all components from EMS/NMS tool

- The selected bidder is responsible for integration and discovery of all the IP enabled equipment in the EMS/NMS tool whether available / supplied under the project or as directed by authority
- It will be selected bidder's responsibility to identify all such components and ensure that they are a part of EMS tool in order to qualify the SLA terms and conditions. Authority will not be responsible in case of any errors / omissions.
- In case of any requirement of upgradation of EMS, the bidder will have to do the same at their own cost after necessary approval from the authority. No additional cost will be borne by the authority.
- All bandwidth related parameters as required in the SLAs must be adhered to in the EMS/NMS tool (e.g bandwidth utilization, latency, packet loss etc)

15. Annexure 1 - Format of Certificate by Bidder sharing land border

[Certificate should be provided on bidder letter head]

Date: dd/mm/yyyy

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Dear Sir,

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

(Signature of the Bidder)

Printed Name Designation

Seal
Date:
Place:
Business Address:

16. Annexure 2 – Format for Earnest Money Deposit

Date: dd/mm/yyyy

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

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

Whereas M/s <<Name of Bidder>>, a company incorporated under the <<Act>>, its registered office at …….. or (hereinafter called 'the Bidder') has submitted its Proposal dated ---------- for "Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited"

KNOW ALL MEN by these presents that WE <<Name of Bank>> of ---------- ---------- having our registered office at ---------- ---------- (hereinafter called "the Bank") are bound unto the Gandhinagar Smart City Limited (hereinafter called "the Client") in the sum of Rs. _____ for which payment well and truly to be made to the said Client, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this ---------- day of ---------- 2025

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Bid
2. If the Bidder, having been notified of the acceptance of its Proposal by the Client during the period of validity of Proposal, bidder:

    - withdraws his participation from the Proposal during the period of validity of Proposal document;
    - fails to extend the validity if required and as requested or
    - fails to produce Performance Bank Guarantee in case of award of tender within 15 days of award of LOI or awarding contract whichever is earlier

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

This guarantee will remain in force up to the period of bid validity and its validity should be extensible to 60 days beyond the bid validity date. Any demand in respect thereof should reach the Bank not later than the above date.

(Authorized Signatory of the Bank)

17. Annexure 3- Template for Pre-Bid Queries

Bidder shall submit all pre-bid queries in excel in the following format.

RFP Name and Number:

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:	

Sr. No	RFP Document Reference (Volume No.)	Section No.	Page No.	Content of the RFP requiring clarification	Clarification sought

18. Annexure 4 – Power of Attorney

(Rs. 300 stamp paper)

Know by all men by these presents, We (Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorize Mr. / Ms (name and residential address of Power of attorney holder) who is presently employed with us and holding the position of as our Attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Proposal for "Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited" Bid Number: < > including signing and submission of all documents and providing information / responses to the Department, representing us in all matters before Department, and generally dealing with the Department in all matters in connection with our Proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us.
For,

Name: Designation: Date & Time: Seal:

Business Address:

Accepted,

(Signature)

(Name, Title and Address of the Attorney)

Witness 1 Name and Signature

Witness 2 Name and Signature

Note:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- The Power of Attorney shall be provided on Rs.300/- stamp paper and notarized
- The Power of Attorney should be supported by a duly authorized resolution of the Board of Directors of the company
- Bidder authorizing the person who is issuing this power of attorney on behalf of the Bidder.

19. Annexure 5 – Format for Submission of Commercial Bids

Total Price Summary

Sr No	Head	Amount (INR)	Amount (INR) in words
1	OPEX price for 24 months applicable components (Inclusive of all taxes, levies, duties, etc. as applicable)		
2	OPEX price for components where O&M starts from 15th May 2027 (Inclusive of all taxes, levies, duties, etc. as applicable)		
3	OPEX Price for GIS Annual maintenance cost for GIS software, licenses and applications (to be paid only as per manpower utilized)		
4	Annual Technical Support of GIS development Manpower Charges (will be paid only if manpower is utilized by GSCDL)		
5	Price Component for Dismantling/Shifting/Reinstallation		
6	Total for Upgradation / Increase of Internet Bandwidth + Leased Circuit Bandwidth (will be paid only if line items are executed)		
Grand Total (1+2+3+4+5+6)			

Note:

- The Details has to be entered Online only.
- The bidder must ensure that their commercial bid contains reasonable unit rates of OPEX line items in the BoQ
- GSCDL may identify abnormally higher / lower unit rates of line items and seek justifications from bidders on the same.
- In case of difference between in amounts of numbers and alphabets, alphabets will prevail over numbers
- Prices indicated in the schedules shall be inclusive of all taxes, Levies, duties etc. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for.
- During the payment stage, GSCDL reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
- The Bidder needs to account for all Out of Pocket expenses due to Boarding, Lodging and other related items

The Bidder may add any additional line item (with adequate details and pricing information) in table below towards the end that may be required to fulfill the RFP and project requirements in totality.

Price Component BoQ for Components for 24 months

Sr No	Solution	UOM	Quantities	Year 1 O&M cost inclusive of taxes	Year 2 O&M cost inclusive of taxes	Total O&M cost inclusive of taxes
A	**Adaptive Traffic Control System**					
A1	ATCS Traffic Controller	Numbers	21			
A2	Countdown timer	Numbers	82			
A3	Galvanized Cantilever poles	Numbers	82			
A4	Galvanized Standard Poles	Numbers	102			
A5	Pedestrian lamp heads – Stop Man	Numbers	154			
A6	Pedestrian lamp heads – Walk Man	Numbers	154			
A7	Junction Box/Cabinets with necessary foundation and earthing	Numbers	21			
A8	Traffic Light Aspects – Amber	Numbers	164			
A9	Traffic Light Aspects – Green	Numbers	480			
A10	Traffic Light Aspects – Red	Numbers	164			
A11	UPS with battery backup 1 hour	Numbers	21			
A12	Vehicle Detector Camera	Numbers	82			
A13	Complete civil works/Cabling works/electrical works/ Networking works for ATCS junctions	Locations	21			
A14	Any Other ATCS					
B	**Cloud**					
B1	Antivirus Server (DC)	Required	1			
B2	Failover Server for every sub-System module in N+1 mode (DC)	Required	1			
B3	Firewall (DC)	Required	1			
B4	Intrusion Prevention System (DC)	Required	1			
B5	L3 Switches (DC)	Required	1			
B6	Networking (Passive Components) (DC)	Required	1			
B7	Primary Storage (DC)	Required	1			
B8	Racks (DC)	Required	1			
B9	Secondary Storage (DC)	Required	1			
B10	Server and OS for Adaptive Traffic Control System (ATCS) including traffic Enforcement-RLVD,ANPR,SVD (DC)	Required	2			
B11	Server and OS for Contact Center Application as required (DC)	Required	1			
B12	Server and OS for ECB as required (DC)	Required	1			
B13	Server and OS for ICCC application as required (DC)	Required	1			
B14	Server and OS for Intelligent Transit Management System (ITMS) (DC)	Required	1			
B15	Server and OS for PA as required (DC)	Required	1			
B16	Server and OS for Smart Poles along with all its sub components like smart street light, WIFI AP Environmental sensors (DC)	Required	1			
B17	Server and OS for Solid Waste Management System (DC)	Required	1			

Sr No	Solution	UOM	Quantities	Year 1 O&M cost inclusive of taxes	Year 2 O&M cost inclusive of taxes	Total O&M cost inclusive of taxes
B18	Server and OS for Variable Messaging Signage as required (DC)	Required	1			
B19	Server Load Balancer (DC)	Required	1			
B20	Any Other Cloud					
C	**Cloud DC for ERP and GIS**					
C1	16 GB RAM for DC Cloud services/components for ERP and GIS	Required	2			
C2	300 GB SAS Storage for DC Cloud services/components for ERP and GIS	Required	2			
C3	Database License for all prevalent databases like Oracle, My SQL, PostgreSQL, Sybase or any equivalent for DC Cloud services/components for ERP and GIS	Required	1			
C4	Eight Cores/vCPU (of Latest series/generation of 64 bit x86 processor(s) with minimum Processor speed of 2.4 GHz) for DC Cloud services/components for ERP and GIS	Required	2			
C5	Licensed version OS of 64 bit latest version of Linux/Unix/Microsoft® Windows based Enterprise Operating system for DC Cloud services/components for ERP and GIS	Required	1			
C6	Any Other Cloud DC for ERP and GIS					
D	**Disaster Recovery**					
D1	DRM (DC-DR Sync) Software	Required	1			
D2	Security Infra	Required	1			
D3	Server side Infra	Required	1			
D4	Storage	Required	1			
D5	Any other Disaster Recovery					
E	**Emergency Call Box**					
E1	Emergency Call Box (installed on ATCS Pole)	Numbers	3			
E2	Emergency Call Box (installed on VMSB)	Numbers	10			
E3	Any other ECB					
F	**General Surveillance**					
F1	IR illuminators	Numbers	45			
F2	Junction box - General Surveillance	Numbers	19			
F3	Outdoor box camera	Numbers	45			
F4	Outdoor PTZ camera	Numbers	21			
F5	Poles for cameras and equipment with necessary foundation and earthing	Numbers	26			
F6	UPS with Battery backup of 1 hour	Numbers	19			
F7	Any other General Surveillance					
G	**ICCC Components**					
G1	48 Port L3 Rack Mountable Top of the Rack (TOR) Switch at Interim ICCC	Numbers	2			
G2	65/70 LED display to present critical information Display	Numbers	0			
G3	8 Port L2 Industrial Grade Switch at edge location	Numbers	117			
G4	Access Control System	Numbers	1			
G5	Audio Mixer and speaker system	Numbers	1			

Sr No	Solution	UOM	Quantities	Year 1 O&M cost inclusive of taxes	Year 2 O&M cost inclusive of taxes	Total O&M cost inclusive of taxes
G6	Complete civil works/Cabling works/electrical works/ Networking works for ICCC	Lot	1			
G7	Comfort Air Conditioning	Numbers	9			
G8	Core switch at ICCC	Numbers	2			
G9	DG Set (For IT Load Only)	Numbers	1			
G10	Digital Set top boxes	Numbers	1			
G11	Electrical and power cabling	Lot	1			
G12	Electrical Cabling and Necessary Illumination Devices	Lot	1			
G13	Fire and Smoke Detection System	Numbers	1			
G14	Firewall	Numbers	2			
G15	Fixed Dome Cameras	Numbers	12			
G16	IP PABX System	Numbers	1			
G17	IP Phones	Numbers	11			
G18	KVM Module	Numbers	1			
G19	LAN and CAT-6 cabling	Numbers	1			
G20	Microphone	Numbers	4			
G21	Multi-Function Laser Printer (City Operations Room)	Numbers	2			
G22	Networking/IT Racks	Numbers	3			
G23	Operator Workstations (City Operations Room, Manager, Help Desk, technical support, contact Centre, security room and war room)	Numbers	8			
G24	Plotter (City Management Room)	Numbers	1			
G25	PRI Modem pair	Numbers	1			
G26	Primary and secondary server with necessary hardware configuration along with required licensed operating system, for supporting current and future Video Management System (VMS) requirement sizing.	Numbers	2			
G27	Primary and secondary storage with necessary hardware configuration along with required licenses, for supporting current and future Video Management System (VMS) requirement sizing.	Numbers	2			
G28	Public Address System	Numbers	1			
G29	Services for PRI Lines	Lot	1			
G30	Services for SMS Gateway (with 1000 sms pack)	Lot	1			
G31	Television set (Meeting Room)	Numbers	1			
G32	UPS with Battery backup of 1 hour	Numbers	3			
G33	Video Conferencing Unit	Numbers	1			
G34	Video management system supporting minimum 455 cameras from day one (of any make supporting open standard / ONVIF)	Numbers	455			
G35	Video wall controller with wall management software	Numbers	1			
G36	Video Wall Cubes- 70/72 LED in 5 X 2 matrix	Numbers	8			
G37	Wireless LAN controller (Hardware/Software with server)	Numbers	1			
G44	Any other ICCC					
H	**Intelligent Transport Management System**					

Sr No	Solution	UOM	Quantities	Year 1 O&M cost inclusive of taxes	Year 2 O&M cost inclusive of taxes	Total O&M cost inclusive of taxes
H1	Automatic Vehicle Tracking System solution for ITMS and solid waste management with Geo Tagging, Geo referencing, Geo fencing in co-ordination with the route plan for vehicle tracking.	Numbers	1			
H2	Bus Station UPS (Station UPS would require 4 hours of backup)	Numbers	8			
H3	Camera at bus stop	Numbers	32			
H4	City Bus stop PIS Display Unit (LED based) and Communication units	Numbers	10			
H5	GPS Module for City Buses/In bus vehicle tracking system	Numbers	35			
H6	Incident Management System	Numbers	1			
H7	Complete civil works/Cabling works/electrical works/ Networking works	Locations	8			
H8	PIS Management System	Numbers	1			
H9	Vehicle Planning, scheduling and dispatch system	Numbers	1			
H10	Web portal and mobile application	Numbers	1			
H12	Any other ITMS					
I	**Internet Bandwidth**					
I1	150 MBPS	Numbers	1			
I2	Any other Internet Bandwidth					
J	**Leased Circuit Bandwidth**					
J1	100 Mbps	Numbers	2			
J2	150 Mbps	Numbers	2			
J3	16 Mbps	Numbers	20			
J4	2 Mbps	Numbers	6			
J5	20 Mbps	Numbers	17			
J6	30 Mbps	Numbers	6			
J7	40 Mbps	Numbers	12			
J8	50 Mbps	Numbers	0			
J9	8 Mbps	Numbers	7			
J10	Any other Leased Circuit Bandwidth					
K	**Manpower**					
K1	Project Manager	Numbers	1			
K2	Field Support Manpower	Numbers	6			
K3	Network Expert (to manage all internal and external networks)	Numbers	1			
K4	Infrastructure Expert (Server, Storage and cloud services	Numbers	1			
K5	Any other manpower					
L	**Other Smart Elements**					
L2	Wifi Ap	Numbers	9			
L3	Any other Smart Elements					
M	**P2P**					
M1	P2P Connectivity at S.P Office Gandhinagar	Lot	1			
M2	Any other P2P Connectivity at S.P Office Gandhinagar					

Sr No	Solution	UOM	Quantities	Year 1 O&M cost inclusive of taxes	Year 2 O&M cost inclusive of taxes	Total O&M cost inclusive of taxes
N	**Public Address System**					
N1	Public Address(PA) system including amplifier	Numbers	13			
N2	Any other Public Address System					
O	**Smart Pole**					
O1	Any other (Energy Meter) on Smart Pole	Numbers	40			
O2	Environmental Sensor on Smart Pole	Numbers	40			
O3	Junction Box/Cabinets with necessary foundation and earthing for Smart Pole	Numbers	40			
O4	Panic buttons on Smart Pole	Numbers	40			
O5	PTZ CCTV camera on smart pole	Numbers	40			
O6	Smart pole with necessary foundation, electric, networking and accessories components	Numbers	40			
O7	Smart Street Light on Smart Pole	Numbers	40			
O8	UPS with Battery backup of 1 hour for Smart Pole	Numbers	40			
O9	Variable Messaging Boards on Smart Pole	Numbers	40			
O10	Wi-fi AP on Smart Pole	Numbers	40			
O11	Any other Smart Pole					
P	**Software & License**					
P1	Operation and Maintenance of Adaptive Traffic Control System (ATCS) including traffic enforcement system- RLVD, SVD, ANPR (Software)	Lot	2			
P2	Operation and Maintenance of Anti-virus (Software)	Lot	1			
P3	Operation and Maintenance of Any other server side Software required to cater Functional, Technical and SLA requirement specified in this RFP	Lot	1			
P4	Operation and Maintenance of Contact Centre application and database	Lot	1			
P5	Operation and Maintenance of ECB (Software)	Lot	2			
P6	Operation and Maintenance of Enterprise Management System (including SLA Mngt, HelpDesk Mngt, Network Mngt, BMS) (Pl give the break-up if different s/w required) 1	Lot	1			
P7	Operation and Maintenance of ICCC City Operations System Application	Lot	1			
P8	Operation and Maintenance of Intelligent Transit Management System (ITMS) (Software)	Lot	1			
P10	Operation and Maintenance of PA System (Software)	Lot	2			
P11	Operation and Maintenance of Smart Poles (Software)	Lot	1			

Sr No	Solution	UOM	Quantities	Year 1 O&M cost inclusive of taxes	Year 2 O&M cost inclusive of taxes	Total O&M cost inclusive of taxes
P12	Operation and Maintenance of Solid Waste Management System (Software)	Lot	1			
P13	Operation and Maintenance of Variable Messaging Signage (Software)	Lot	1			
P14	Any other License and Software					
Q	**Solid Waste Management**					
Q1	Electronic Weighbridge data controller	Numbers	1			
Q2	Mobile Application for SWM Supervisor and Workers attendance	Numbers	1			
Q3	Vehicle tracking device	Numbers	100			
Q4	Any other Solid Waste Management					
R	**Traffic Enforcement System**					
R1	ANPR Cameras	Numbers	126			
R2	Civil works, electrical works, networking works for Traffic Enforcement System (RLVD, ANPR, SVD)	Locations	21			
R3	IR for RLVD and ANPR Camera	Numbers	189			
R4	IR for SVD Camera	Numbers	20			
R5	Junction box/Cabinets with necessary foundation and earthing for Traffic Enforcement System (RLVD, ANPR, SVD)	Numbers	21			
R6	Local Processing Units for TES System	Locations	21			
R7	Network Video Recorders for RLVD & ANPR	Locations	21			
R8	Poles for RLVD, ANPR, SVD	Numbers	73			
R9	RLVD Cameras	Numbers	63			
R10	SVD Cameras	Numbers	20			
R11	UPS with battery backup of 1 hour for Traffic Enforcement System (RLVD, ANPR, SVD)	Numbers	21			
R12	Any other Traffic Enforcement System					
S	**Variable Messaging Sign Board**					
S1	Variable Messaging Sign board (including accessories)	Numbers	10			
S2	Any other Variable Messaging Signboard					
T	**Viewing Center Components**					
T1	Networking/IT Racks	Numbers	1			
T2	Monitoring Workstations	Numbers	1			
T7	Any other Viewing Center Components					
O&M for 24 months Total						

Price Component BoQ for Components where O&M is applicable from 15th May 2027

BoQ Line items applicable from 15th May 2027 till end of contract				
Sr No	**Solution**	**UOM**	**Quantities**	**O&M Cost from 15th May 2027 till 30th Sep 2027**
G	**ICCC Components**			
G2	65/70 LED display to present critical information Display	Numbers	2	
G3	8 Port L2 Industrial Grade Switch at edge location	Numbers	16	
G38	Furniture for City Operations Room Managers Desk	Numbers	1	
G39	Furniture for City Operations Room Operator Desks	Numbers	15	
G40	Furniture for Help Desk Team	Numbers	2	
G41	Furniture for Meeting Room meeting table and chairs	Numbers	1	
G42	Furniture for Technical Support Team Desks	Numbers	8	
G17	IP Phones	Numbers	19	
G23	Operator Workstations (City Operations Room, Manager, Help Desk, technical support, contact Centre, security room and war room)	Numbers	20	
G43	Services for DTH Subscription	Numbers	1	
G36	Video Wall Cubes- 70/72 LED in 5 X 2 matrix	Numbers	2	
G44	Any other ICCC			
H	**Intelligent Transport Management System**			
H4	City Bus stop PIS Display Unit (LED based) and Communication units	Numbers	17	
H11	Integration with existing AVLS	Numbers	1	
H12	Any other ITMS			
T	**Viewing Center Components**			
T3	IP Phones	Numbers	1	
T4	LED Displays (42 LED display)	Numbers	1	
T5	Network Laser Printer (Monochrome)	Numbers	1	
T6	Networking Cost (Passive Components)	Numbers	1	
T6	Switches	Numbers	1	
T7	Any other Viewing Center Components			
15 May 2027 onwards Total				

Price Component BoQ for GIS Annual maintenance cost for GIS software, licenses and applications

Phase	Category	Sr. No.	Components	Proposed Quantity	Unit of Measurement	O&M Cost Year-1	O&M Cost Year-2	Total
GIS	Operation and Maintenance of GIS Phase 1	GIS 1	Annual Maintenance Cost of all GIS related Software Licenses and Applications	1	Lumpsum			
Any Other		Any Other	TO be filled by bidder					
GIS Total								

Annual Technical Support of GIS and Mobile application and development Manpower Charges (will be paid only if manpower is utilized by GSCDL)

Sn	Details of the Personnel/Profile	Number of Resources Deployed (A)	Number of Man Months (Months) (B)	Unit Man-Month charges (INR) (C)	Total Charges(A*B*C)
1	Project Manager				
2	Programmer				
3	Business analyst				
4	Database Administrator				
5	Tester				
6	System Administrator				
Annual Technical Support for GIS Total					

Price Component BoQ for Dismantling-shifting-reinstallation

BoQ for Dismantling and Reinstallation of components						
Sr.No.	**Component / Line Item**	**Indicative quantity**	**UoM**	**Unit Base Price (INR) without tax**	**All taxes, levies, duties etc. as applicable (INR) (Per Unit)**	**Total Price including All taxes, levies, duties, etc.as applicable (INR)**
A	**B**	**C**	**D**	**E**	**F**	**G=(E+F) * C**
1	Rate for dismantling and shifting standard and cantilever Poles with all components on poles (traffic lights, IR, Fixed Cameras, PTZ Cameras, ECB, PAs etc. including but not limited to all accessories, civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	50	Number			
2	Rate for reinstallation including transportation of standard and cantilever Poles with all components on poles (traffic lights, IR, Fixed Cameras PTZ cameras etc. including but not limited to all accessories, civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	50	Number			
3	Rate for dismantling and shifting VMSBs with all its components and accessories including but not limited to its junction box and including but not limited to all accessories, civil work, labor work, HYDRA and manlift services, foundation removal,	5	Number			

BoQ for Dismantling and Reinstallation of components						
Sr.No.	**Component / Line Item**	**Indicative quantity**	**UoM**	**Unit Base Price (INR) without tax**	**All taxes, levies, duties etc. as applicable (INR) (Per Unit)**	**Total Price including All taxes, levies, duties, etc.as applicable (INR)**
	related work like cabling, earthing, networking etc.					
4	Rate for reinstallation including of VMSBs with all its components and accessories including but not limited to its junction box and including but not limited to all accessories, civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	5	Number			
7	Rate for dismantling and shifting Smart Poles with all its components (Panic Buttons, Environment sensors, PTZ cameras, Smart Streetlights etc) and accessories including but not limited to junction box and including all accessories, civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	5	Number			

BoQ for Dismantling and Reinstallation of components						
Sr.No.	**Component / Line Item**	**Indicative quantity**	**UoM**	**Unit Base Price (INR) without tax**	**All taxes, levies, duties etc. as applicable (INR) (Per Unit)**	**Total Price including All taxes, levies, duties, etc.as applicable (INR)**
8	Rate for reinstallation including but not limited to transportation of Smart Poles with all its components (Panic Buttons, Environment sensors, PTZ cameras, Smart Streetlights etc) and accessories including junction box and including but not limited to all accessories, civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	5	Number			
9	Rate for dismantling and shifting large junction boxes and accessories along with its contents like UPS, batteries, LPUs, NVRs, Amplifiers, Patch cords, routers etc) including but not limited to other accessories civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	5	Number			
10	Rate for reinstallation including transportation of large junction boxes and accessories along with its contents like UPS, batteries, LPUs, NVRs, Amplifiers, Patch cords, routers etc) including but not limited to other accessories civil work, labor work,	5	Number			

BoQ for Dismantling and Reinstallation of components						
Sr.No.	**Component / Line Item**	**Indicative quantity**	**UoM**	**Unit Base Price (INR) without tax**	**All taxes, levies, duties etc. as applicable (INR) (Per Unit)**	**Total Price including All taxes, levies, duties, etc.as applicable (INR)**
	HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.					
11	Rate for dismantling and shifting ATCS junction boxes and accessories along with its contents including but not limited to civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	5	Number			
12	Rate for reinstallation including transportation of ATCS junction boxes and accessories along with its contents, including but not limited to civil work, labor work, HYDRA and manlift services, foundation removal, related work like cabling, earthing, networking etc.	5	Number			
13	Provisioning of Electric Power	10	Locations			
14	Provisioning of Network	10	Locations			
Dismantling-shifting-reinstallation Total						

Upgradation / Increase of Bandwidth (will be paid only on need basis if line items are executed)

Sr No	Solution	UOM	Quantities (Indicative)	Unit Base Price (INR) without tax	All taxes, levies, duties etc. as applicable (INR) (Per Unit)	Total Price including All taxes, levies, duties, etc.as applicable (INR)
A	B	C	D	E	F	G=(E+F) * C
Internet Bandwidth						
1	150 MBPS	Numbers	1			
2	100 MBPS	Numbers	1			
3	50 MBPS	Numbers	1			
Total Internet Bandwidth (A)						
Leased Circuit Bandwidth						
1	100 Mbps	Numbers	1			
2	150 Mbps	Numbers	1			
3	16 Mbps	Numbers	1			
4	2 Mbps	Numbers	1			
5	20 Mbps	Numbers	1			
6	30 Mbps	Numbers	1			
7	40 Mbps	Numbers	1			
8	50 Mbps	Numbers	1			
9	8 Mbps	Numbers	1			
Total Leased Circuit Bandwidth (B)						
Total for Internet Bandwidth + Leased Circuit Bandwidth C= (A+B)						

20. Annexure 6 – No Deviation Certificate

(To be provided on the Company letter head)

Place

Date

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Dear Sir,

This is to certify that our offer is exactly in line with your tender enquiry/RFP (including amendments) no. dated . This is to expressly certify that our offer contains no deviation either Technical (including but not limited to Scope of Work, Business Requirements Specification, Functional Requirements Specification, Hardware Specification and Technical Requirements Specification) or Commercial in either direct or indirect form.

(Authorized Signatory)

Signature:

Name:
Designation:
Address:
Seal:
Date:

21. Annexure 7 – Total Responsibility Certificate

(To be provided on the Company letter head)

Place

Date

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Dear Sir,
This is to certify that we undertake the total responsibility for the defect free operation of the proposed solutions as per the requirement of the RFP for the duration mentioned in all the volumes of the RFP.

(Authorized Signatory)

Signature: Name:

Designation:

Address:

Seal:

Date:

22. Annexure 8 – Non Disclosure Agreement

WHEREAS, we the undersigned Bidder,_____, having our principal place of business or registered office at_____, are desirous of bidding for RFP No. <<>> dated <<DD-MM-YYYY>> "Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited." (hereinafter called the said 'RFP') to the "Gandhinagar Smart City Limited", hereinafter referred to as 'Authority'

And,

WHEREAS, the Bidder is aware and confirms that the Authority's business or operations, information, application or software, hardware, business data, architecture schematics, designs, storage media and other information or documents made available by the Authority in the RFP documents during the bidding process and thereafter, or otherwise (confidential information for short) is privileged and strictly confidential and or proprietary to the Authority,

NOW THEREFORE, in consideration of disclosure of confidential information, and in order to ensure the Authority's grant to the Bidder of specific access to Authority's confidential information, property, information systems, network, databases and other data, the Bidder agrees to all of the following conditions.

It is hereby agreed as under:

1. The confidential information to be disclosed by the Authority under this Agreement ("Confidential Information") shall include without limitation, any and all information in written, representational, electronic, verbal or other form relating directly or indirectly to processes, methodologies, algorithms, risk matrices, thresholds, parameters, reports, deliverables, work products, specifications, architecture, project information, security or zoning strategies & policies, related computer programs, systems, trend analysis, risk plans, strategies and information communicated or obtained through meetings, documents, correspondence or inspection of tangible items, facilities or inspection at any site to which access is permitted by the Authority.
2. Confidential Information does not include information which:
    a. the Bidder knew or had in its possession, prior to disclosure, without limitation on its confidentiality;
    b. information in the public domain as a matter of law;
    c. is obtained by the Bidder from a third party without any obligation of confidentiality;
    d. the Bidder is required to disclose by order of a competent court or regulatory authority;
    e. Is released from confidentiality with the written consent of the Authority.

The Bidder shall have the burden of proving hereinabove are applicable to the information in the possession of the Bidder.

3. The Bidder agrees to hold in trust any Confidential Information received by the Bidder, as part of the Tendering process or otherwise, and the Bidder shall maintain strict confidentiality in respect of such Confidential Information, and in no event a degree of confidentiality less than the Bidder uses to protect its own confidential and proprietary information. The Bidder also agrees:
    a. to maintain and use the Confidential Information only for the purposes of bidding for this RFP and thereafter only as expressly permitted herein;
    b. to only make copies as specifically authorized by the prior written consent of the Authority and

with the same confidential or proprietary notices as may be printed or displayed on the original;

c. to restrict access and disclosure of Confidential Information to their employees, agents, consortium members and representatives strictly on a "need to know" basis, to maintain confidentiality of the Confidential Information disclosed to them in accordance with this clause; and
d. To treat Confidential Information as confidential unless and until Authority expressly notifies the Bidder of release of its obligations in relation to the said Confidential Information.

4. Notwithstanding the foregoing, the Bidder acknowledges that the nature of activities to be performed as part of the Tendering process or thereafter may require the Bidder's personnel to be present on premises of the Authority or may require the Bidder's personnel to have access to software, hardware, computer networks, databases, documents and storage media of the Authority while on or off premises of the Authority. It is understood that it would be impractical for the Authority to monitor all information made available to the Bidder's personnel under such circumstances and to provide notice to the Bidder of the confidentiality of all such information.

   Therefore, the Bidder shall disclose or allow access to the Confidential Information only to those personnel of the Bidder who need to know it for the proper performance of their duties in relation to this project, and then only to the extent reasonably necessary. The Bidder will take appropriate steps to ensure that all personnel to whom access to the Confidential Information is given are aware of the Bidder's confidentiality obligation. Further, the Bidder shall procure that all personnel of the Bidder are bound by confidentiality obligation in relation to all proprietary and Confidential Information received by them which is no less onerous than the confidentiality obligation under this agreement.

5. The Bidder shall establish and maintain appropriate security measures to provide for the safe custody of the Confidential Information and to prevent unauthorized access to it.

6. The Bidder agrees that upon termination or expiry of this Agreement or at any time during its currency, at the request of the Authority, the Bidder shall promptly deliver to the Authority the Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the Bidder or its Affiliates or directors, officers, employees or advisors based on the Confidential Information and promptly certify such destruction.

7. Confidential Information shall at all times remain the sole and exclusive property of the Authority. Upon completion of the Tendering process and or termination of the contract or at any time during its currency, at the request of the Authority, the Bidder shall promptly deliver to the Authority the Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the Bidder or its Affiliates or directors, officers, employees or advisors based on the Confidential Information within a period of sixty days from the date of receipt of notice, or destroyed, if incapable of return. The destruction shall be witnessed and so recorded, in writing, by an authorized representative of the Authority. Without prejudice to the above the Bidder shall promptly certify to the Authority, due and complete destruction and return. Nothing contained herein shall in any manner impair rights of the Authority in respect of the Confidential Information.
8. In the event that the Bidder hereto becomes legally compelled to disclose any Confidential Information, the Bidder shall give sufficient notice and render best effort assistance to the Authority to enable the Authority to prevent or minimize to the extent possible, such disclosure. Bidder shall

not disclose to a third party any Confidential Information or the contents of this RFP without the prior written consent of the Authority. The obligations of this Clause shall be satisfied by handling Confidential Information with the same degree of care, which the Bidder applies to its own similar Confidential Information but in no event less than reasonable care.

For and on behalf of:
(BIDDER)

Authorised Signatory	Office Seal:
Name:	Place:
Designation:	Date:

23. Annexure 9 – Pre-qualification checklist

Sr No	Pre Qualification Criteria	Document Proof
1	The Sole Bidder Should be: Registered under the Companies Act 1956/2013 and subsequent amendments in India Should have history of continuous operation in India for last 10 years or more calculated from date of publication of this RFP Bidder should be a legal entity duly registered to do business in India.	Copy of Certification of Incorporation / Registration Certificate PAN Card GST Certificate Certificate for "Change in The Name", if applicable
2	The Bidder must have a minimum average annual turnover of at least Rs. 30 Crore from combination of ICT Business, ICT Services / related smart technology projects and services, during the mentioned Five financial years as on 31.03.2024 i.e FY 2019-20, 2020-21, 2021-22, 2022-23, 2023-24. Bidder must have positive net-worth as on end of Financial year 2023-24	Audited and Certified Balance Sheet and Profit/Loss Account for the last Five Financial Years should be enclosed. CA Certificate be enclosed to be submitted as proof (Annexure 10)
3	Bidder must have demonstrable expertise and experience of Setting up and O&M of Integrated command and control room with minimum contract value of Rs. 5.00 cr along with its dashboard application for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years Assignment in which CCC comprising of Control Room/ Command and Control Room Software, Video wall, Operations room, contact center /helpdesk are built. The above experience must be demonstrated under 1 single project	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate

Sr No	Pre Qualification Criteria	Document Proof
4	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of Adaptive Traffic Control System and Traffic Enforcement System (RLVD/ANPR/SVD) components along with its software application and centralized monitoring for at least 20 junctions (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
5	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M along with its software application and centralized monitoring for at least 450 General Surveillance Cameras (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
6	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of planning, scheduling, monitoring of Vehicles (Fire vehicles, CIty Buses, Ambulances Waste Collection Vehicles etc.) through at least 100 GPS based devices (under 1 single project) with centralized monitoring for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate

Sr No	Pre Qualification Criteria	Document Proof
7	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M along with its software application of at least 10 Variable Messaging Display Boards (under 1 single project) for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
8	Bidder must have demonstrable expertise and experience of design, supply, installation, testing, commissioning and O&M of physical servers, physical storages (NAS / Scale-out NAS / SAN / Unified or equivalent storage solution), cloud services including Disaster Recovery services under 1 single project for Smart City/ ULB/ Government Organization / State Government Departments / Central Govt Departments in India in the last 7 years	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
9	Bidder must have demonstrable expertise and experience (under 1 single project) of integration with a centralized command and control system of at least 4 out of following solutions for Smart City/ ULB/ Government Organization / Government Department in India in the last 7 years under a single project 1. Adaptive Traffic Control System 2. Traffic Enforcement System (RLVD, ANPR, SVD) 3. Smart Streetlights 4. General Surveillance Cameras 5. Intelligent Transport Management System 6. Solid Waste Management (Door to Door waste collection)	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate
10	Bidder must have demonstrable expertise and experience of supply, installation, testing, commissioning and O&M of at least 1 GIS application, with a minimum contract value of Rs. 5 crores, for Smart City/ ULB/	Citation (annexure 12) Work Order/Contract Agreement/Letter of Appointment Copy of Work completion certificate

Sr No	Pre Qualification Criteria	Document Proof
	Government Organization / Government Department in India in the last 7 years	
11	The sole bidder should not be blacklisted by any Central / State Government Department or Central/State Public Sector Units (PSUs) in India as on the bid submission date & **Litigation History** The sole bidder should provide accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last five years. A consistent history of awards against the Applicant or any partner of a joint venture may result in failure of the applicant.	Undertaking by the authorized signatory of bidder as per format given in Annexure Declaration on Non-Blacklisting (Annexure 11 on Rs. 300 stamp paper notarized) Litigation History format is given along with Annexure 11
12	Sole Bidder/Lead bidder should establish Project office within 45 days of issuance of LoI in Ahmedabad/Gandhinagar if not established earlier	Undertaking to open Office in Ahmedabad / Gandhinagar (annexure 13) Or Copies of any two of the followings: Property Tax / Electricity / Telephone Bill /GST Registration /Lease agreement.
13	The Sole Bidder should possess any one of the below certifications which are valid at the time of bidding: ISO 9001: 2015 or above ISO 20000-1:2018 or above for IT service management ISO 27001:2013 or above for Information Security Management System Any other equivalent certification	Copies of valid certificates in the name of bidding entity.

24. Annexure 10– Financial Turnover and Net-worth

(Copy of audited financial statements or declaration from the appointed statutory auditor/CA to be provided as proof of the financial turnover and net worth)

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

We hereby certify the below information on the basis of the audited financial statements for the financial years ended on 31st March 2021, 31st March 2021, 31st March 2022, 31st Mar 2023 and 31st Mar 2024 of _____ having its Registered Office at _____

Financial year	Annual Turnover in Cr (Overall)	Annual Turnover in Cr (combination of ICT Business, ICT Services / related smart technology projects and services)	Net-worth
2019-20			
2020-21			
2021-22			
2022-23			
2023-24			
Average Annual Turnover			

25. Annexure 11 – Declaration of Non-Blacklisting

<<To be submitted on Rs. 300 stamp paper and duly notarized >>

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Sir/Madam,

Date: dd/mm/yyyy

In response to the Tender Ref. No._____dated_____ for "Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited", as an owner/ partner/ Director of_____, I/ We hereby declare that presently our Company/ firm _____ is having unblemished record and is not declared ineligible for corrupt and fraudulent practices either indefinitely or for a particular period of time by any State/ Central Government/ PSU.

We further declare that presently our Company/ firm is not blacklisted and not declared ineligible for reasons other than corrupt and fraudulent practices by any State/ Central Government/ PSU on the date of Bid Submission.

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

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Place:

Business Address:

Litigation History

Other party (ies)	Employer	Cause of Dispute	Amount involved	Remarks showing present status

26. Annexure 12 – Bidder's experience Citation Format

Bidder is requested to furnish the credentials in the following format for both Pre-qualification and Technical criterion. **All credentials should be followed by relevant documentary proof with highlighted sections**

Name of the Project & Location	
Client's Name and Complete Address with email address	
Narrative description of project	
Contract Value for the bidder (in Indian Rupees)	
Date of Start	
Date of Completion	

27. Annexure 13 – Office Undertaking

(Company letterhead)

Place:

Date:

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Subject: Undertaking to Open an Office in Ahmedabad/Gandhinagar in Gujarat

Dear Sir,
We here by undertake that: We are willing to open an office in Ahmedabad/Gandhinagar within 45 days in case it is declared successful in the bidding Process.

We have carefully read and understood the entire tender document. We do agree to all the terms and conditions mentioned in the RFP.

Signature:
Name:
Designation:
Address:
Seal:
Date:

28. Annexure 14 – Curriculum Vitae of team members

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

12	Highlights of relevant assignments handled and significant accomplishments (Use following format for each project)

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

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Day/Month/Year :

(Signature of candidate)
(Signature of Authorized personnel of bidder)

29. Annexure 15 Summary of Resources Proposed

Sr. No	Name of the resource	Proposed Role	Highest Degree	Basic Qualification (e.g., B.Sc. or BE or MCA or Post Graduation)	Certifications (e.g., PMP or ITIL or TOGAF	Total Experience (In Years)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

30. Annexure 16 Technical Bid Cover Letter

(in company's letter head)

Place:
Date:

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Dear Sir,

We, the undersigned, offer to provide the services for [Insert Title of the Assignment] in accordance with your Request for Proposal dated [Insert Date].

Our attached Technical Proposal is based on our full understanding of scope of work, requirements, terms & Conditions and we unequivocally accept the same and shall be binding as mentioned in the RFP.

Yours sincerely,

(Authorized Signatory)

Signature:
Name:
Designation:
Address:
Seal:
Date:

31. Annexure 17 Format for Performance Bank Guarantee

(To be stamped in accordance with Stamp Act)

Place:
Date:

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Bank Guarantee Number:

Dear Sir,
In consideration of **<<Name & Address of the Purchaser/Indenter >>** (hereinafter referred to as the OWNER/PURCHASER which expression shall unless repugnant to the context or meaning thereof include successors, administrators and assigns) having awarded to M/s._____having Principal Office at (hereinafter referred to as the "SELLER" which expression shall unless repugnant to the context or meaning thereof include their respective successors, administrators, executors and assigns) the supply of_____ _____by issue of Purchase Order No…….. Dated ……. issued by_____for and on behalf of the OWNER/PURCHASER and the same having been accepted by the SELLER resulting into CONTRACT for supplies of materials/equipment as mentioned in the said purchase order and the SELLER having agreed to provide a Contract Performance and Warranty Guarantee for faithful performance of the aforementioned contract and warranty quality to the OWNER/PURCHASER,_____having Head Office at (hereinafter referred to as the 'Bank' which expressly shall, unless repugnant to the context or meaning thereof include successors, administrators, executors and assigns) do hereby guarantee to undertake to pay the sum of Rs._____(Rupees_____) to the OWNER/PURCHASER on demand at any time up to___without a reference to the SELLER. Any such demand made by the OWNER/PURCHASER on the Bank shall be conclusive and binding notwithstanding any difference between Tribunals, Arbitrator or any other authority.

The Bank undertakes not to revoke this guarantee during its currency without previous consent of the OWNER/PURCHASER and further agrees that the guarantee herein contained shall continue to be enforceable till the OWNER/PURCHASER discharges this guarantee. OWNER/PURCHASER shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance by the SELLER of the aforementioned CONTRACT. The OWNER/ PURCHASER shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the SELLER, and to exercise the same at any time in any manner, and either to enforce to forebear to enforce any covenants contained or implied, in the aforementioned CONTRACT between the OWNER/PURCHASER and the SELLER or any other course of or remedy or security available to the OWNER/PURCHASER.

The Bank shall not be released of its obligations under these presents by any exercise by the OWNER/PURCHAER of its liability with reference to the matters aforesaid or any of them or by reason or any other acts of omission or commission on the part of the OWNER/PURCHASER or any other indulgence shown by the OWNER/PURCHASER or by any other matter or things.

The Bank also agree that the OWNER/PUCHASER at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against the SELLER and not withstanding any security or other guarantee that the OWNER/PURCHASER may have in relation to the SELLER's liabilities. Notwithstanding anything contained herein above our liability under this Guarantee is restricted to Rs._____(Rupees_____) and it shall remain in force up to and including_____and shall be extended from time to time for such period as may be desired by the SELLER on whose behalf this guarantee has been given.

Dated at_____on this_day of__2024

Signed and delivered by

For & on Behalf of
Name of the Bank & Branch & Its official Address

List of approved Banks

(Any Nationalized Bank including the public sector bank or Private Sector Banks authorized by RBI or Commercial Bank or Regional Rural Banks of Gujarat or Co-Operative Bank of Gujarat (operating in India having branch at Ahmedabad/ Gandhinagar) as per the G.R. no. EMD/10/2013/655/DMO dated 31.03.2014 issued by Finance Department or further instruction issued by Finance department time to time.

32. Annexure 18 Undertaking of Authorization from OEM

<< To be printed on OEM's Letter Head and Signed by Authorized Signatory of the OEM>>

Place:
Date:

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Subject: Participation in response to the Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

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

Subject: Manufacturer Authorization Letter

Dear Sir,
We, who are established and reputed manufacturers / producers of _____having factories / development facilities at (address of factory / facility) do hereby authorize M/s____(Name and address of Agent) to submit a Bid, and sign the contract with you against the above Bid Invitation.

We hereby extend our full guarantee and warranty for the Solution for the entire contract period, Products and services offered by the above firm against this Bid Invitation. If Bidder/Service provider fails to give support for the components under this RFP, we shall provide onsite comprehensive warranty support to the client / arrange to provide onsite comprehensive warranty support to client through our authorized partners.

We hereby offer below products with Model number to our Authorized partners for submission in the bid:

Sr. No	Item Description	Qty	Model Number
1			

Yours faithfully,

For and on behalf of M/s_____(Name of the manufacturer)

(Authorized Signatory)

Signature:
Name:
Designation:
Address:
Seal:
Date:

33. Annexure 19 Change Control Note

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

34. Annexure 20 SLA matrix

SLA for smart city components

Performance Area	Base line		Lower Performance		Breach		Remarks
	Metric	Points	Metric	Points	Metric	Points	
Application Performance (includes any user/system application related to the project (Overall application availability)							
Command & Control Center	99%	6.00	>= 96.50 % to <99.00%	3.50	<96.50 %	0	Data to be provided for Web Application/Server Software as the case may be
Adaptive Traffic Control System	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Integrated Transport Management System	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Solid Waste Management System	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Smart Poles and other smart elements	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
TES (RLVD & SVD)	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
General Surveillance	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Public Address System	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Emergency Call Box	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
WiFi	95%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Variable Messaging Signboards	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Contact Center Application	99%	6.00	>= 96.50 % to <99.00%	3.00	<96.50 %	0	
Reports Generation Response Time (Alerts/MIS/Logs etc.)	Simple query < 5 secs Medium complexity query <30 secs High complexity query <60 secs	2.00	Simple query = 5.01 secs to < 10 secs Medium complexity query = 30.01 secs to 60 secs High complexity query = 60 secs to 2 min	1.00	Simple query =>10 secs Medium complexity query => 60 secs High complexity query => 2 min	0	

Performance Area	Base line		Lower Performance		Breach		Remarks
	Metric	Points	Metric	Points	Metric	Points	
Maximum time for successful settings modification of field devices	< 4 secs	2.00	4.01 to 6 secs	1.00	=> 6 secs	0	
End user Equipment							
Monitoring workstations at Command Centers	99%	4.00	>= 96.50 % to <99.00%	2.00	<96.50 %	0	
IP Phones	99%	4.00	>= 96.50 % to <99.00%	2.00	<96.50 %	0	
Video Wall (Controller)	99%	4.00	>= 96.50 % to <99.00%	2.00	<96.50 %	0	In case display is found not working then total deduction/pro rata deduction as defined will be applicable)
P2P Link (Switch)	99%	4.00	>= 96.50 % to <99.00%	2.00	<96.50 %	0	
Underlying IT Infrastructure Uptime/Availability at Data Center							
Production Servers Uptime	99.95%	15.00	>= 99.50 % to <99.94%	7.50	<99.50 %	0	
Storage System Uptime	99.95%	15.00	>= 99.50 % to <99.94%	7.50	<99.50 %	0	
Security /Patch Services for IT Infrastructure							
Firewall and any other security appliance Uptime	100%	10.00	98.00% to 99.99%	5.00	<98.00	0	
Security rules update within 2 hours of approved change management request.	0 violations of service parameters	1.00	1 – 4 violations	0.50	> 4 violations	0	
Anti-virus, Anti-spyware, Anti-spam updates within 24 hrs. of request	0 violations of service parameters	1.00	1 – 4 violations	0.50	> 4 violations	0	
Critical Patches – within 48 hours of patch release.	0 violations of service parameters	1.00	1 – 4 violations	0.50	> 4 violations	0	

Performance Area	Base line		Lower Performance		Breach		Remarks
	Metric	Points	Metric	Points	Metric	Points	
Non Critical Patches – within 15 days of patch release.	0 violations of service parameters	1.00	1 – 4 violations	0.50	> 4 violations	0	
Street IT Infrastructure							
Switches	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	In case SLA for any device is not being monitored on EMS tool, then the same needs to be added and SLAs to be provided
ITMS camera	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
ATCS Controller	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
Surveillance cameras	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
ATCS Camera	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
RLVD cameras	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
ANPR cameras	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
SVD cameras	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
Emergency Call Box	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
Variable Messaging Signboards	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
Public Address System	98.00%	4.00	>= 96.50 % to <98.00%	2.00	<96.50 %	0	
Smart LEDs	99.50%	4.00	>= 96.50 % to <99.50%	2.00	<96.50 %	0	
Environment Sensor	99.50%	4.00	>= 96.50 % to <99.50%	2.00	<96.50 %	0	
Internet bandwidth and leased circuit							
Leased Circuit Uptime	99.50%	4.00	>= 96.50 % to <99.50%	2.00	<99.50 %	0	
Internet Uptime	99.50%	4.00	>= 96.50 % to <99.50%	2.00	<99.50 %	0	

Others

Others	Target	Penalty
WiFI Throughput and coverage	95% per month per location	Minimum throughput and coverage has to be 95% of prescribed values of each AP. SELECTED BIDDER must ensure measurement of these results using an automated tool and provision of results to GSCDL. In case throughput falls below the guaranteed level, GSCDL will impose the penalty of Rs.2000/- (Rupees two thousand) per instance per location in additional to SLA and Penalty.
Video analytics performance: ANPR for Standard Roman Number	80%	Rs. 1000/- per wrongly identified regd. Number plate below the prescribed limit of SLA

Others	Target	Penalty
plates (2 wheelers & Above)		
Video analytics performance: ANPR for Non Standard Roman Number plates (2 wheelers & Above)	60%	Rs. 500/- per wrongly identified regd. Number plate below the prescribed limit of SLA
Change Request and Enhancement Criticality of change – Low	<T, where T is timeframe for completion of CR as agreed by GSCDL & bidder	Frequency is weekly per occurrence 1 % of change request value per week for the first two weeks for each occurrence, 2 % of change request value per week for every subsequent week, subject to a maximum of 10%
Change Request and Enhancement Criticality of change – Medium	<T, where T is timeframe for completion of CR as agreed by GSCDL & bidder	Frequency is weekly per occurrence 1.5 % of change request value per week for the first two weeks for each occurrence, 2.5 % of change request value per week for every subsequent week, subject to a maximum of 10% post which GSCDL may invoke annulment of the contract.
Change Request and Enhancement Criticality of change - High	<T, where T is timeframe for completion of CR as agreed by GSCDL & bidder	Frequency is weekly per occurrence 2.0 % of change request value per week for the first two weeks for each occurrence, 3.0 % of change request value per week for every subsequent week, subject to a maximum of 10% post which GSCDL may invoke annulment of the contract.
Issue resolution Severity – 1	<= 8 Hrs from the time the call is logged by end user.	Frequency of occurrence is daily 0.1% of monthly opex value per week for the first two weeks for each occurrence, 0.2% of monthly opex value per week for every subsequent week, subject to a maximum of 10% post which GSCDL may invoke annulment of the contract. Definitions i. Severity 1: ICCC or Smart City applications down for more than 70% users. ii. Severity 2: ICCC or Smart City applications down for more than 30% users. iii. Severity 3: Modules of ICCC not functional for users. iv. Severity 4: Minor functionality issues with ICCC or Smart City applications v. Response Time: Response time is defined as the time the support vendor takes to respond from the time that ticket was raised. vi. Resolution Time: Resolution time is defined as the time the vendor takes to resolve the issue or provide acceptable workaround for the issue.
Issue resolution Severity – 2	<= 4 days from the time the call is logged by end user.	
Issue resolution Severity – 3	<= 10 days from the time the call is logged by end user.	
Issue resolution Severity – 4	<= 20 days from the time the call is logged by end user.	
Resource non availability Project Manager	Availability throughout the contract	Penalty of Rs 25,000 /-in 1st week of non- availability Penalty of Rs. 50,000/week for of non- availability after 1st week
Resource non availability for Technical experts	Availability throughout the contract	Penalty of Rs 2,500 per day of non-availability for first 7 days Penalty of Rs. 5,000 per day of non-availability after 7 days
Resource non availability for other manpower	Availability throughout the contract	Penalty of Rs 1,000 per day of non-availability

Others	Target	Penalty
Resource deployed is not as per the requirements mentioned in the RFP	Resource must fulfil the RFP terms and conditions	Penalty of Rs 1,000 per day
Application security	Cyber crime / Hacking / data theft / Fraud attributable to service provider	Depending on the type of incident and its impact, a penalty of 10% on the entire contract value or in case of severe issue (as defined by GSCDL) such breach may lead to termination of contract
Resolution of any issues observed during audit which e.g displays not working, non performance of Non IT components etc.	<T, where T is timeframe for resolution of issue as agreed by GSCDL & bidder	Frequency of occurrence is daily Rs. 1000 /- per day after expiry of original or extended T
Planned maintenance and downtime requested by SELECTED BIDDER	Only 3 allowed per month	Rs. 1,00,000 per occurrence for planned downtime beyond 3. SELECTED BIDDER must inform GSCDL promptly all scheduled/unscheduled downtime taken. Also for every unscheduled maintenance/downtime, Rs. 1,00,000 /- will be deducted per occurrence
Latency and Packet Loss Internet Bandwidth (24hrs)	Latency: 200 ms	No of instances X No of hours X Rs. 2000. If Network Latency is not resolved within 24 Hrs. then Rs 2000 per instance per Hour or part thereof after 24 hrs are over
Latency and Packet Loss Leased circuits (24 hrs)	Latency: 50 ms	No of instances X No of hours X Rs. 2000. If Network Latency is not resolved within 24 Hrs. then Rs 2000 per instance per Hour or part thereof after 24 hrs are over
Latency and Packet Loss Packet loss across any N/w link (6 hrs)	Less than 1%	No of instances X No of hours X Rs. 1000. If the Packet Loss is not resolved within 6 Hour then Rs. 1000/- per instance per Hour or part thereof after 24 hrs are over
Non Compliance to Security Audit observations within timelines	There should be no non compliances	Rs. 1,00,000 /- per audit wherein non compliances have been reported

GIS SLA

Any patch released by the OEM needs to be applied to the corresponding product within 7 working days. Any delay in applying the patch will attract penalty of Rs. 2000/- per day.

- Any Software bug identified by GSCDL/ GMC/ Bidder/ SI's service engineer, will be classified in types:
- Critical: Having bearing on the day-to-day functioning of the respective system / availability of application (full functionality or part functionality) for the GSCDL/ GMC users
- Non-critical: Not-having bearing on the day-to-day functioning of the respective system
- In case of dispute between GSCDL/ GMC and the successful Bidder with respect to classification of bugs as Critical or Non-Critical, decision of the Commissioner, GSCDL/ GMC, shall be final and binding on the Successful Bidder.
- Resolution time & the penalty component for the bug fixing is given below (applicable on 24 * 7 basis):

Type of Bug	Bug / Problem resolution time	Penalty Amount
Critical	2 hours	Rs. 2000/- (per hour)

	1 hour if the bug / problem has re-occurred within 7 days of the earlier resolution	Rs. 2000/- per hour beyond 8 hours
		Rs. 4000/- per hour beyond 24 hours
Non-critical	3 working days	Rs. 500/- (per day)
	1 working day if the bug / problem has re- occurred within 15 days of the earlier resolution	Rs. 2000/- per day beyond 7 days
		Rs. 2000/- per day beyond 10 days

35. Annexure 21 Financial Proposal Cover letter

(in company's letter head)

Place:

Date:

To,
C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Registered Address: Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Ref: Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

Bid Reference No:

Subject: Financial Proposal Cover Letter

Dear Sir,
We, the undersigned, offer to provide the services for____[Insert Title of the Assignment] in accordance with your Request for Proposal dated_____[Insert Date] and our Technical Proposal.

Price and Validity

All the prices mentioned in our Bid are in accordance with the terms as specified in the bidding documents. All the prices and other terms and conditions of this Bid are valid for a period of Twelve Months from the date of submission of the Bids.

We are an entity registered in India and do hereby confirm that our Bid price (Total Contract Value in this Commercial Proposal) includes all taxes including income tax and professional tax except Service Tax / GST. The prices we have offered, shall remain fixed and not be subject to escalation for any reason whatsoever within the period of Contract. Any increase / decrease in rates of taxes shall be to our account. 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 is altered under the law, we shall pay the same.

Bid Price

We declare that our Bid Prices are for the entire scope of the work and requirements as specified in the Bid documents, irrespective of whatever has been stated to the contrary anywhere else in our Bid.

Contract Performance Guarantee

We hereby declare that in case the Contract is awarded to us, we shall submit the Contract Performance Bank Guarantee in the form prescribed at Annexure as specified in the RFP.

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

We understand you are not bound to accept any Proposal you receive. Yours sincerely,

(Authorized Signatory)
Signature:
Name:
Designation:
Address:
Seal:
Date:

36. Annexure 22 Format of Compliance letter

(Shall be submitted a scanned copy on Bidder's letterhead duly signed by Authorized signatory)

Place:
Date:

To,
C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Registered Address: Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Ref: Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

Bid Reference No:

Subject: Compliance with the tender terms and conditions, specifications and Eligibility Criteria

Dear Sir,

With reference to above referred tender, I, undersigned <<Name of Signatory>>, in the capacity of <<Designation of Signatory>>, is authorized to give the undertaking on behalf of <<Name of the bidder>>. We wish to inform you that we have read and understood the technical specification and total requirement of the above mentioned bid submitted by us on <<date>>

We hereby confirm that all our quoted items meet or exceed the requirement and are absolutely compliant with specifications mentioned in the bid document.

We also explicitly understand that all quoted items meet technical specification of the bid & that such technical specification overrides the brochures/standard literature if the same contradicts or is absent in brochures.

In case of breach of any tender terms and conditions or deviation from bid specification other than already specified as mentioned above, the decision of Tender Committee for disqualification will be accepted by us.

(Authorized Signatory)
Signature:
Name:
Designation:
Address:
Seal:
Date:

37. Annexure 23 Undertaking of No Conflict of Interest

(Company letterhead)

Place:
Date:

To,

C.E.O,
GANDHINAGAR SMART CITY DEVELOPMENT LIMITED
Registered Address: Pandit Deendayal Bhavan, Behind Fire Station,
Sector-17, Gandhinagar, (Gujarat) Pin-382016

Ref: Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited

Bid Reference No:

Subject: Undertaking on No Conflict of Interest

Dear Sir,
I / We as Bidder (Bidder) do hereby undertake that there is absence of, actual or potential conflict of interest on our part, on part of our Subcontractor(s) (in case of any subcontractor) due to prior, current, or proposed contracts engagements, or affiliations with GSCDL.

I / We also confirm that there are no potential elements (time frame for service delivery, resource, financial or other) that would adversely impact our ability to complete the requirements of this RFP. We undertake and agree to indemnify and hold GSCDL, Government of Gujarat harmless against all claims, losses, damages, costs, expenses, proceeding fees of legal advisors (on a reimbursement basis) and fees of other professionals incurred (in the case of legal fees & fees of professionals, reasonably) by GSCDL, Government of Gujarat and / or its representatives, if any such conflict arises later.

(Authorized Signatory)
Signature:
Name:
Designation:
Address:
Seal:
Date:

38. Annexure 24 Contract Agreement

THIS Agreement made the ……..date of……..2017, between……..(hereinafter…….referred to as the "SELECTED BIDDER") of the one part and …… (hereinafter called the "Authority") of the other part. WHEREAS SELECTED BIDDER has the required professional skills, personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract and is about to perform services as specified in this RFP ……..(hereinafter called "works") mentioned, enumerated or referred to in certain Contract conditions, specification, scope of work, other sections of the RFP, covering letter and schedule of prices which, for the purpose of identification, have been signed by …….. on behalf of the …….. SELECTED BIDDER and ……..(the Authority) on behalf of the Authority and all of which are deemed to form part of the Contract as though separately set out herein and are included in the expression "Contract" whenever herein used.

NOW, THEREFORE, IT IS HEREBY AGREED between the parties as follows:

- The Authority has accepted the tender of SELECTED BIDDER for the provision and execution of the said works for the sum of ……..upon the terms laid out in this RFP.
- SELECTED BIDDER hereby agrees to provide Services to Authority, conforming to the specified Service Levels and conditions mentioned
- The following documents attached hereto shall be deemed to form an integral part of this Agreement:

Complete Request for Proposal (RFP) Document	*RFP and corrigendum and addendum, if any*
Break-up of cost components	*Bidder's Commercial bid*
The Authority's Letter of Intent dated <<>>	*To be issued later by the Authority*
SELECTED BIDDER's Letter of acceptance dated <<>>	*To be issued later by the SELECTED BIDDER*
Bid submitted by SELECTED BIDDER as per file No. <<>>	*Bidder's Technical bid*

- The mutual rights and obligations of the "Authority" and SELECTED BIDDER shall be as set forth in the Agreement, in particular:
  - SELECTED BIDDER shall carry out and complete the Services in accordance with the provisions of the Agreement; and
  - The "Authority" shall make payments to SELECTED BIDDER in accordance with the provisions of the Agreement.

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

1. General Conditions of Contract

1.1 Definition of Terms

- "Applicable Law(s)" Any statute, law, ordinance, notification, rule, regulation, judgment, order, decree, bye-law, approval, directive, guideline, policy, requirement or other governmental restriction or any similar form of decision applicable to the relevant party and as may be in effect on the date of the execution of this Agreement and during the subsistence thereof, applicable to the Project.
- "Authority" means the Gandhinagar Smart City Development Limited. The project shall be executed in Gandhinagar and shall be owned by Gandhinagar Smart City Development Limited.
- "Bidder" shall mean organization/consortium submitting the proposal in response to this RFP.
- "Selected Bidder" means the bidder who is selected by the Authority at the end of this RFP process. The agency shall carry out all the services mentioned in the scope of work of this RFP.
- "Contract" means the Contract entered into by the parties with the entire documentation specified in the RFP.
- "Contract Value" means the price payable to Selected Bidder under this Contract for the full and proper performance of its contractual obligations.
- "Commercial Off-The-Shelf (COTS)" refers to software products that are ready-made and available for sale, lease, or license to the general public.
- "Data Centre Site" means the Data Centre sites including their respective Data Centre space, wherein the delivery, installation, integration, management and maintenance services as specified under the scope of work are to be carried out for the purpose of this contract.
- "Document" means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes, databases or any other electronic documents as per IT Act 2000.
- "Effective Date" means the date on which this Contract is signed or LoI is issued by Authority, whichever is earlier and executed by the parties hereto. If this Contract is executed in parts, then the date on which the last of such Contracts is executed shall be construed to be the Effective Date.
- "GCC" means General Conditions of Contract
- "Goods" means all of the equipment, sub-systems, hardware, software, products accessories, software and/or other material/items which SELECTED BIDDER is required to supply, install and maintain under the contract.
- "Integrated Command and Control Centre" OR "ICCC" means the center from where GSDCL/GMC/Gandhinagar Police department would conduct surveillance on security and civil issues on the entire Gandhinagar City.
- "Intellectual Property Rights" means any patent, copyright, trademark, trade name, service marks, brands, proprietary information whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.
- "Go- Live" means installation, testing, commissioning of project, and commencement of all smart city components, including training as per scope of work mentioned in RFP. Bidder should have the approval from Authority for user acceptance testing.
- "Notice" means: a notice; or a consent, approval or other communication required to be in writing under this Contract.
- "OEM" means the Original Equipment Manufacturer of any equipment/system/software/product which are providing such goods to the Authority under the scope of this RFP.
- "Bidder's Team" means SELECTED BIDDER who has to provide goods & services to the Authority under the scope of this Contract. This definition shall also include any and/or all of the employees of SELECTED BIDDER, authorized service providers/partners and representatives or other personnel employed or engaged either directly or indirectly by selected Bidder for the purposes of this Contract.
- "Replacement Service Provider" means the organization replacing SELECTED BIDDER in case of contract termination for any reasons

- "Sub-Contractor" shall mean the entity named in the contract for any part of the work or any person to whom any part of the contract has been sublet with the consent in writing of the Authority and the heirs, legal representatives, successors and assignees of such person.
- "SCC" means Special Conditions of Contract.
- "Services" means the work to be performed by the agency pursuant to this RFP and to the contract to be signed by the parties in pursuance of any specific assignment awarded by the Authority.
- "Server Room" or "Data Center" shall have the same meaning.

1.2 Interpretation

In this Contract unless a contrary intention is evident:

- the clause headings are for convenient reference only and do not form part of this Contract;
- unless otherwise specified a reference to a clause number is a reference to all of its sub-clauses;
- the word "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to" whether or not they are followed by such phrases;
- unless otherwise specified a reference to a clause, sub-clause or section is a reference to a clause, sub-clause or section of this Contract including any amendments or modifications to the same from time to time;
- a word in the singular includes the plural and a word in the plural includes the singular;
- a word importing a gender includes any other gender;
- a reference to a person includes a partnership and a body corporate;
- a reference to legislation includes legislation repealing, replacing or amending that legislation;
- Where a word or phrase is given a particular meaning it includes the appropriate grammatical forms of that word or phrase which have corresponding meanings.
- In the event of an inconsistency between the terms of this Contract and the RFP and the Bid, the terms hereof shall prevail.

1.3 Condition Precedent

This Contract is subject to the fulfillment of the following conditions precedent by Selected Bidder.

- Furnishing by Selected Bidder, an unconditional and irrevocable Performance Bank Guarantee (PBG) and acceptable to the Authority which would remain valid until such time as stipulated by the Authority.
- Obtaining of all statutory and other approvals required for the performance of the Services under this Contract. This may include approvals/clearances, wherever applicable, that may be required for execution of this contract e.g. clearances from Government authorities for importing equipment, exemption of Tax/Duties/Levies, work permits/clearances for Bidder/Bidder's team, etc.
- Furnish notarized copies of any/all contract(s) duly executed by Selected Bidder and its OEMs existing at the time of signing of this contract in relation to the Authority's project. Failure to do so within stipulated time of signing of contract would attract penalty as defined in this Section.
- Furnishing of such other documents as the Authority may specify/demand.
- The Authority reserves the right to waive any or all of the conditions specified in Clause 3 above in writing and no such waiver shall affect or impair any right, power or remedy that the Authority may otherwise have.

- In the event that any of the conditions set forth in Clause 3 hereinabove are not fulfilled within 1 months from the date of this Contract, or such later date as may be mutually agreed upon by the parties, the Authority may terminate this Contract.
- In case there is a contradiction between the sections, the below hierarchy of sections in order of precedence :
    - Pre-bid clarification and Corrigendum, if any
    - Scope of work in this RFP
    - Annexures of RFP
    - RFP

1.4 Scope of Work

Scope of the work shall be as defined in RFP and Annexures thereto of the tender.

- Authority has engaged Selected Bidder to provide services related to implementation of Operations and Maintenance of Smart City Components and Integrated Command & Control Center of Gandhinagar Smart City Development Limited using which the Authority intends to perform its business operations. Selected Bidder is required to provide such goods, services and support as the Authority may deem proper and necessary, during the term of this Contract, and includes all such processes and activities which are consistent with the proposals set forth in the Bid, the Tender and this Contract and are deemed necessary by the Authority, in order to meet its business requirements (hereinafter 'scope of work'). The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 30 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.
- The SELECTED BIDDER shall ensure the continued successful operations and maintenance of the existing Adaptive Traffic Control System (ATCS), Traffic Enforcement System (TES), General Surveillance, Geographic Information System (GIS) components and others in the RFP in Gandhinagar city, including their extension to new areas as defined in this RFP. The SELECTED BIDDER is also responsible for incorporating any additional functionalities identified during the extension's assessment or requirement gathering phase, with no extra charges, to meet the needs of GSCDL. The SI shall manage and support the following systems and components: ATMS, TES (including RLVD and SVD), General Surveillance, and integration with the existing Integrated Command and Control Center, ensuring compatibility with both Cloud-based and On-premise Data Centers and Disaster Recovery solutions. Integration must be consistent with the current architecture and include the subsystems already operational in the city or planned for future implementation.
- Detailed scope of work have been mentioned in section 12 of the RFP which need to be followed by the selected Bidder

1.5 Key Performance Measurement

Unless specified by the Authority to the contrary, Selected Bidder shall deliver the goods, perform the services and carry out the scope of work in accordance with the terms of this Contract, Scope of Work and the Service Specifications as laid down under Service Level Agreement of this section.
If the Contract, scheduled requirements, service specification includes more than one document, then unless the Authority specifies to the contrary, the later in time shall prevail over a document of earlier date to the extent of any inconsistency.

The Authority reserves the right to amend any of the terms and conditions in relation to the Contract/Service Specifications and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the Schedule of Requirements.

1.6 Commencement of Progress

Selected Bidder shall subject to the fulfillment of the conditions precedent above, commence the performance of its obligations in a manner as per the Scope of Work. The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 30 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.

Selected Bidder shall proceed to carry out the activities/services with diligence and expedition in accordance with any stipulation as to the time, manner, mode, and method of execution contained in this Contract.

Selected Bidder shall be responsible for and shall ensure that all activities/services are performed in accordance with the Contract, Scope of Work and Service Specifications and that Selected Bidder's Team complies with such Specifications and all other standards, terms and other stipulations/conditions set out hereunder.

Selected Bidder shall perform the activities/services and carry out its obligations under the Contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the industry and shall observe sound management, engineering and security practices. Selected Bidder shall always act, in respect of any matter relating to this Contract, as faithful advisors to the Authority and shall, at all times, support and safeguard the Authority's legitimate interests in any dealings with Third parties.

1.7 Standards of Performance

Selected Bidder shall perform the Services and carry out its obligations under the Contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and best practices used in the industry and with IT standards recognized by international professional bodies and shall observe sound management, engineering and security practices. It shall employ appropriate advanced technology and engineering practices and safe and effective equipment, machinery, material and methods. Selected Bidder shall always act, in respect of any matter relating to the Contract, as faithful advisors to the Authority and shall, at all times, support and safeguard the Authority's legitimate interests in any dealings with Third Parties.

1.8 Approvals and Required Consents

The Authority shall extend necessary support to Selected Bidder to obtain, maintain and observe all relevant and customary regulatory and governmental licenses, clearances and applicable approvals (hereinafter the "Approvals") necessary for Selected Bidder to provide the Services. The costs of such Approvals shall be borne by SELECTED BIDDER. Both parties shall give each other all co-operation and information reasonably.

The Authority shall also provide necessary support to Bidder in obtaining the Approvals. In the event that any Approval is not obtained, Selected Bidder and the Authority shall co-operate with each other in achieving a reasonable alternative arrangement as soon as reasonably practicable for the Authority, to continue to process its work with as minimal interruption to its business operations as is commercially reasonable until such Approval is obtained, provided that SELECTED BIDDER shall not be relieved of its obligations to provide the Services and to achieve the Service Levels until the Approvals are obtained if and to the extent that Selected Bidder's obligations are dependent upon such Approvals.

1.9 Bidder's Obligations

- Selected Bidder's obligations shall include all the activities as specified by the Authority in the Scope of Work and other sections of the Tender and Contract and changes thereof to enable Authority to meet the objectives and operational requirements. It shall be Selected Bidder's responsibility to ensure the proper and successful implementation, performance and continued operation of the proposed solution in accordance with and in strict adherence to the terms of his Bid, the Tender and this Contract.
- The Selected Bidder must take complete handover of all components (IT/Not IT/Network related, Cloud components/Server/Storage/DC DR) applicable within 45 days from the existing System Integrator and send a report to GSCDL. The handover has to be seamless.
- In addition to the aforementioned, Selected Bidder shall provide services to manage and maintain the said system and infrastructure as mentioned in RFP
- Authority reserves the right to interview the personnel proposed that shall be deployed as part of the project team. If found unsuitable, the Authority may reject the deployment of the personnel. But ultimate responsibility of the project implementation shall lie with Selected Bidder
- Authority reserves the right to require changes in personnel which shall be communicated to Selected Bidder. Selected Bidder with the prior approval of the Authority may make additions to the project team. Selected Bidder shall provide the Authority with the resume of Key Personnel and provide such other information as the Authority may reasonably require. The Authority also reserves the right to interview the personnel and reject, if found unsuitable. In case of change in its team members, for any reason whatsoever, Selected Bidder Shall also ensure that the exiting members are replaced with at least equally qualified and professionally competent members.
- Selected Bidder shall ensure that none of the Key Personnel as mentioned in RFP and manpower exit from the project during first 6 months of the beginning of the project. In such cases of exit, a penalty of INR 2 lacs per such replacement shall be imposed on SELECTED BIDDER.
- Selected Bidder should submit profiles of only those resources who shall be deployed on the project. Any change of resource should be approved by the Authority and compensated with equivalent or better resource. The Authority may interview the resources suggested by SELECTED BIDDER before their deployment on board. It does not apply in case of change requested by the Authority.
- In case of change in its team members, Selected Bidder shall ensure a reasonable amount of time overlap in activities to ensure proper knowledge transfer and handover/takeover of documents and other relevant materials between the outgoing and the new member.
- Selected Bidder shall ensure that Selected Bidder's Team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract. SELECTED BIDDER shall ensure that the services are performed through the efforts of Selected Bidder's Team, in accordance with the terms hereof and to the satisfaction of the Authority. Nothing in this Contract relieves Selected Bidder from its liabilities or obligations under this Contract to provide the Services in accordance with the Authority's directions and requirements and as stated in this Contract and the Bid to the extent accepted by the Authority and Selected Bidder shall be liable for any non- performance, non-compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its Team.
- Selected Bidder shall be fully responsible for deployment/installation/development and integration of all the software and hardware components and resolve any problems/issues that may arise due to integration of components.
- Selected Bidder shall ensure that the OEMs supply equipment/components including associated accessories and software required and shall support Selected Bidder in the installation, commissioning, integration and maintenance of these components during the entire period of contract. SELECTED BIDDER shall ensure that the COTS OEMs supply the software applications and shall support Selected Bidder in the installation/deployment, integration, roll-out and maintenance of these applications during the entire period of contract. It must clearly be understood by Selected Bidder that warranty and O&M of the system, products and services incorporated as part of system would commence from the effective date of the respective phase including all the solutions

proposed. Selected Bidder would be required to explicitly display that he/they have a back to back arrangement for provisioning of warranty/O&M support till the end of contract period with the relevant OEMs. The annual maintenance support shall include patches and updates the software, hardware components and other devices.

- All the software licenses that Selected Bidder proposes should be perpetual software licenses. The software licenses shall not be restricted based on location and the Authority should have the flexibility to use the software licenses for other requirements if required.
- All the OEMs that Bidder proposes should have Dealer possession licenses.
- The Authority reserves the right to review the terms of the Warranty and Annual Maintenance agreements entered into between Selected Bidder and OEMs and no such agreement/contract shall be executed, amended, modified and/or terminated without the prior written consent of the Authority. An executed copy of each of such agreements/contracts shall, immediately upon execution be submitted by Selected Bidder to the Authority.
- Selected Bidder shall ensure that none of the components and sub-components is declared end- of-sale or end-of-support by the respective OEM at the time of submission of bid. If the OEM declares any of the products/solutions end-of-sale subsequently, the Selected Bidder shall ensure that the same is supported by the respective OEM for contract period.
- If a product is de-supported by the OEM for any reason whatsoever, from the date of Acceptance of the System till the end of contract, Selected Bidder should replace the products/solutions with an alternate (without affecting the overall functionality) that is acceptable to the Authority at no additional cost to the Authority and without causing any performance degradation.
- The Licenses will be in the name of Authority only.
- Selected Bidder shall ensure that the OEMs provide the support and assistance to Selected Bidder in case of any problems/issues arising due to integration of components supplied by him with any other component(s)/product(s) under the purview of the overall solution. If the same is not resolved for any reason whatsoever, Selected Bidder shall replace the required component(s) with an equivalent or better substitute that is acceptable to Authority without any additional cost to the Authority and without impacting the performance of the solution in any manner whatsoever.
- Selected Bidder shall ensure that the OEMs for hardware servers/equipment supply and/or installation of all type of updates, patches, fixes and/or bug fixes for the firmware or software from time to time at no additional cost to the Authority.
- Selected Bidder shall ensure that the OEMs for hardware servers/equipment or Bidder's trained engineers conduct the preventive maintenance on a Quarterly basis and break-fix maintenance in accordance with the best practices followed in the industry. Selected Bidder shall ensure that the documentation and training services associated with the components shall be provided by the OEM partner or OEM's certified training partner without any additional cost to the Authority.
- The training has to be conducted using official OEM course curriculum mapped with the hardware/Software Product's to be implemented in the project.
- Selected Bidder and their personnel/representative shall not alter/change/replace any hardware component proprietary to the Authority and/or under warranty or O&M of third party without prior consent of the Authority.
- Selected Bidder shall provision the required critical spares/components at the designated Datacenter Sites/office locations of the Authority for meeting the uptime commitment of the components supplied by him.
- Selected Bidder's representative(s) shall have all the powers requisite for the execution of scope of work and performance of services under this contract. Selected Bidder's representative(s) shall liaise with the Authority's representative for the proper coordination and timely completion of the works and on any other matters pertaining to the works. Selected Bidder shall extend full co-operation to Authority's representative in the manner required by them for supervision/inspection/observation of the equipment/goods/material, procedures, performance, progress, reports and records pertaining to the works. He shall also have complete charge of

Selected Bidder's personnel engaged in the performance of the works and to ensure compliance of rules, regulations and safety practice. He shall also cooperate with the other Service Providers/Vendors of the Authority working at the Authority's office locations & field locations and DC site. Such Bidder's representative(s) shall be available to the Authority's Representative at respective Datacenter during the execution of works.

- Selected Bidder shall be responsible on an ongoing basis for coordination with other vendors and agencies of the Authority in order to resolve issues and oversee implementation of the same. Selected Bidder shall also be responsible for resolving conflicts between vendors in case of borderline integration issues.
- Selected Bidder is expected to set up a project office in Ahmedabad/Gandhinagar City. The technical manpower deployed on the project should work from the same office. However, some resources may be required to work from the client office during the contract period.
- A separate schedule for dismantling and reinstallation charges has been provided as a part of this RFP. The said charges will be valid for the entire contract duration. The quantities mentioned in the schedule 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 finalised rate under this RFP for the entire contract period. In the future, if the request for Dismantling and Shifting is less that the indicative quantity the bidder is bound to perform Dismantling and Reinstallation activities at the finalised rate under this RFP for the entire contract period. The total value of work will be calculated on pro rata basis as per the actual quantities arrived at the time of execution of dismantling – shifting – reinstallation works
- Any upgradations required in the existing system including applications, IT / Non IT infrastructure, network , EMS/NMS must be carried out by the bidder at no cost to authority.
- Reporting Procedures as defined in the RFP must be followed by the selected Bidder.

1.10 Access to ICCC

The Authority's representative upon receipt of request from Selected Bidder intimating commencement of activities at various locations shall give to Selected Bidder access to as much of the ICCC as may be necessary to enable SELECTED BIDDER to commence and proceed with the installation of the works in accordance with the program of work. Any reasonable proposal of Selected Bidder for access to ICCC to proceed with the installation of work in accordance with the program of work shall be considered for approval and shall not be unreasonably withheld by the Authority. Such requests shall be made to the Authority's representative in writing at least 7 days prior to start of the work.

At the ICCC locations, the Authority's representative shall give to Selected Bidder access to as much as may be necessary to enable Selected Bidder to commence and proceed with the installation of the works in accordance with the program of work or for performance of Facilities Management Services.

1.11 Start of Installation – Dismantled Components

Authority may ask the selected bidder to install components which may have been dismantled previously. Bidder shall co-ordinate with the Authority and stakeholders for the complete setup of sites before commencement of installation of these components and take approval from authority before installation of these components. As per TRAI guidelines, resale of bandwidth connectivity is not allowed. In such a case tripartite agreement should be formed between Authority, selected Bidder and Internet Service Provider(s). Any product supplied must have better specifications than the existing component's specification.

1.12 Reporting Procedures

- Selected Bidder shall monitor progress of all the activities related to the execution of this contract and shall submit to the Authority, progress reports with reference to all related works along with invoice. Reports may also need to be submitted based on need of GSCDL. Certain reports need to be sent on daily basis, quarterly basis, monthly basis which need to be adhered to without fail by selected bidder. Indicative reports to be sent to GSCDL are mentioned below. However authority may ask for additional reports over and above the reports mentioned below
    - Inventory details including latitude & longitude details and working/not working details
    - Security Audit Reports
    - All compliance reports
    - DC DR Drill Reports
    - EMS reports (in case the selected bidder feels that EMS needs some enhancements, to include more components then bidder has to do it at their own cost without any cost to GSCDL.
    - Bandwidth utilization reports
    - Latency and packet loss reports
    - Field visit reports
    - IT / Non IT devices inspection reports
    - Modifications in networks
    - As built drawings / electrical cabling / network diagrams as and when required by GSCDL
- Cost related to the reports will be borne by the selected bidder. Activities related to the reports mentioned above will be the responsibility of the selected bidder(at no cost to GSCDL)
- Formats for all above mentioned reports and their dissemination mechanism shall be discussed and finalized along with project plan. The Authority on mutual agreement between both parties may change the formats, periodicity and dissemination mechanism for such reports.
- Periodic meetings shall be held between the representatives of the Authority and Selected Bidder once in every 15 days during the project to discuss the progress. Selected Bidder will ensure that all concerned personnel are present during such meetings.
- Several review committees involving representative of the Authority and senior officials of Selected Bidder may be formed for the purpose of this project. These committees shall meet at intervals, as decided by the Authority later, to oversee the progress of the project.
- All the goods, services and manpower to be provided/deployed by Selected Bidder under the Contract and the manner and speed of execution and maintenance of the work and services are to be conducted in a manner to the satisfaction of Authority's representative in accordance with the Contract.
- The Authority reserves the right to inspect and monitor/assess the progress/performance of the work/services at any time during the course of the Contract. The Authority may demand and upon such demand being made, Selected Bidder shall provide documents, data, material or any other information which the Authority may require, to enable it to assess the progress/performance of the work/service.
- At any time during the course of the Contract, the Authority shall also have the right to conduct, either itself or through another agency as it may deem fit, an audit to monitor the performance by Selected Bidder of its obligations/functions in accordance with the standards committed to or required by the Authority and Selected Bidder undertakes to cooperate with and provide to the Authority/any other agency appointed by the Authority, all Documents and other details as may be required by them for this purpose. Such audit shall not include Bidder's books of accounts.
- Should the rate of progress of the works or any part of them at any time fall behind the stipulated time for completion or is found to be too slow to ensure completion of the works by the stipulated time, or is in deviation to Tender requirements/standards, the Authority's representative shall so notify Selected Bidder in writing.
- Selected Bidder shall reply to the written notice giving details of the measures he proposes to take to expedite the progress so as to complete the works by the prescribed time or to ensure compliance

to RFP requirements. Selected Bidder shall not be entitled to any additional payment for taking such steps. If at any time it should appear to the Authority or Authority's representative that the actual progress of work does not conform to the approved plan Selected Bidder shall produce at the request of the Authority's representative a revised plan showing the modification to the approved plan necessary to ensure completion of the works within the time for completion or steps initiated to ensure compliance to the stipulated requirements

- The submission seeking approval by the Authority or Authority's representative of such plan shall not relieve Selected Bidder of any of his duties or responsibilities under the Contract.
- In case during execution of works, the progress falls behind schedule or does not meet the Tender requirements, Selected Bidder shall deploy extra manpower/resources to make up the progress or to meet the RFP requirements. Plan for deployment of extra man power/resources shall be submitted to the Authority for its review and approval. All time and cost effect in this respect shall be borne, by Selected Bidder within the contract value.

1.13 Knowledge of ICCC

- Selected Bidder shall be granted access to ICCC for inspection by the Authority before commencement of project. The plan shall be drawn mutually at a later stage.
- Selected Bidder shall be deemed to have knowledge of the ICCC and its surroundings and information available in connection therewith and to have satisfied itself the form and nature thereof including, the data contained in the Bidding Documents, the physical and climatic conditions, the quantities and nature of the works and materials necessary for the completion of the works, the means of access, etc. and in general to have obtained itself all necessary information of all risks, contingencies and circumstances affecting his obligations and responsibilities therewith under the Contract and his ability to perform it. However, if Selected Bidder detects physical conditions and/or obstructions affecting the work, Selected Bidder shall take all measures to overcome them.

1.14 Project Plan

Within 15 calendar days of effective date of the contract/Issuance of LoI, SELECTED BIDDER shall submit to the Authority for its approval a detailed Project Plan with details of the Project showing the sequence, procedure and method in which he proposes to carry out the works. The Plan so submitted by SELECTED BIDDER shall conform to the requirements and timelines specified in the Contract. The Authority and SELECTED BIDDER shall discuss and agree upon the work procedures to be followed for effective execution of the works, which SELECTED BIDDER intends to deploy and shall be clearly specified. The Project Plan shall include but not limited to project organization, communication structure, proposed staffing, roles and responsibilities, processes and tool sets to be used for quality assurance, security and confidentiality practices in accordance with industry best practices, project plan and delivery schedule in accordance with the Contract.

Approval by the Authority's Representative of the Project Plan shall not relieve SELECTED BIDDER of any of his duties or responsibilities under the Contract.

If SELECTED BIDDER's work plans necessitate a disruption/shutdown in Authority's operation, the plan shall be mutually discussed and developed so as to keep such disruption/shutdown to the barest unavoidable minimum. Any time and cost arising due to failure of SELECTED BIDDER to develop/adhere such a work plan shall be to his account.

1.15 Adherence to safety procedures, rules regulations and restriction

- SELECTED BIDDER's Team shall comply with the provision of all laws including labor laws, rules, regulations and notifications issued there under from time to time. All safety and labor laws enforced by statutory agencies and by Authority shall be applicable in the performance of this Contract and Bidder's Team shall abide by these laws.
- Access to the Data Center's Server Room, ICCC shall be strictly restricted. No access to any person except the essential members of SELECTED BIDDER's Team who are authorized by the Authority and are genuinely required for execution of work or for carrying out management/maintenance shall be allowed entry. Even if allowed, access shall be restricted to the pertaining equipment of the Authority only. SELECTED BIDDER shall maintain a log of all activities carried out by each of its team personnel.
- No access to any staff of bidder, except the essential staff who has genuine work- related need, should be given. All such access should be logged in a loss free manner for permanent record with unique biometric identification of the staff to avoid misrepresentations or mistakes
- SELECTED BIDDER shall take all measures necessary or proper to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. SELECTED BIDDER's Team shall adhere to all security requirement/regulations of the Authority during the execution of the work. Authority's employee also shall comply with safety procedures/policy.
- SELECTED BIDDER shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.

1.16 Statutory Requirements

During the tenure of this Contract nothing shall be done by SELECTED BIDDER or his team in contravention of any law, act and/or rules/regulations, there under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep Authority indemnified in this regard.

1.17 Authority's Obligation

- Authority or his/her nominated representative shall act as the nodal point for implementation of the contract and for issuing necessary instructions, approvals, commissioning, acceptance certificates, payments etc. to SELECTED BIDDER.
- Authority shall ensure that timely approval is provided to SELECTED BIDDER as and when required, which may include approval of project plans, implementation methodology, design documents, specifications, or any other document necessary in fulfillment of this contract.
- The Authority's representative shall interface with SELECTED BIDDER, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. Authority shall provide adequate cooperation in providing details, coordinating and obtaining of approvals from various governmental agencies, in cases, where the intervention of the Authority is proper and necessary.
- Authority may provide on Bidder's request, particulars/information/or documentation that may be required by SELECTED BIDDER for proper planning and execution of work and for providing services covered under this contract and for which SELECTED BIDDER may have to coordinate with respective vendors.
- Authority shall provide to SELECTED BIDDER only sitting space and basic infrastructure not including, stationery and other consumables at the Authority's office locations.
- Authority reserves the right to procure the hardware including devices on quarterly basis in first year based on actual deployment and O&M shall be applicable whenever the devices are procured and deployed till end of the contract.
- Site Not Ready: Authority hereby agrees to make the project sites ready as per the agreed specifications, within the agreed timelines. Authority agrees that SELECTED BIDDER shall not be in

any manner liable for any delay arising out of Authority's failure to make the site ready within the stipulated period.

1.18 Payments

- Authority shall make payments to SELECTED BIDDER at the times and in the manner set out in the Payment schedule as specified Payment Milestones in RFP subject to the penalties as mentioned under Service Level Agreement. Authority shall make all efforts to make payments to SELECTED BIDDER within 45 days of receipt of invoice(s) and all necessary supporting documents. No interest will be payable.
- The SELECTED BIDDER shall directly interact with electricity boards for provision of mains power supply at all desired locations. The SELECTED BIDDER shall be responsible to submit the electricity bill including connection charge, meter charge, recurring charges etc. to the electricity board directly for all applicable components. SELECTED BIDDER shall have to submit the challan of bill submission to GSCDL. GSCDL will reimburse the amount submitted to the SELECTED BIDDER after verification in next billing cycle.
- All payments agreed to be made by Authority to SELECTED BIDDER in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable, if any, and Authority shall not be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services.
- No invoice for extra work/change order on account of change order shall be submitted by SELECTED BIDDER unless the said extra work/change order has been authorized/approved by the Authority in writing in accordance with Change Control Note (Annexure 19 of this section of the RFP)
- In the event of Authority noticing at any time that any amount has been disbursed wrongly to SELECTED BIDDER or any other amount is due from SELECTED BIDDER to the Authority, the Authority may without prejudice to its rights recover such amounts by other means after notifying SELECTED BIDDER or deduct such amount from any payment falling due to SELECTED BIDDER. The details of such recovery, if any, shall be intimated to SELECTED BIDDER. SELECTED BIDDER shall receive the payment of undisputed amount under subsequent invoice for any amount that has been omitted in previous invoice by mistake on the part of the Authority or SELECTED BIDDER.
- All payments to SELECTED BIDDER shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under any law, rule or regulation. All costs, damages or expenses which Authority may have paid or incurred, for which under the provisions of the Contract, SELECTED BIDDER is liable, the same shall be deducted by Authority from any dues to SELECTED BIDDER. All payments to SELECTED BIDDER shall be made after making necessary deductions as per terms of the Contract and recoveries towards facilities, if any, provided by the Authority to SELECTED BIDDER on chargeable basis.

1.19 Intellectual Property Rights

- Retention of Ownership except for the rights expressly granted to the Licensee under this Agreement, the Licensor shall retain all right, title and interest in and to the Licensed Technology, including all worldwide Technology and intellectual property and proprietary rights.
- Preservation of Notice Licensee shall not remove, efface or obscure any copyright notices or other proprietary notices or legends from any Licensed Technology or materials provided under this Agreement, and shall reproduce all such notices and legends when incorporating Licensed Technology or materials into any Integrated Products.
- Authority shall own and have a right in perpetuity to use all newly created Intellectual Property Rights which have been developed solely during execution of this Contract, including but not limited to all processes, products, specifications, reports and other documents which have been newly

created and developed by SELECTED BIDDER solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract. SELECTED BIDDER undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the Authority, execute all such agreements/documents and obtain all permits and approvals that may be necessary in regard to the Intellectual Property Rights of the Authority.

- Pre-existing work: All intellectual property rights existing prior to the Effective Date of this Agreement shall belong to the Party that owned such rights immediately prior to the Effective Date. Subject to the foregoing, the Authority will also have rights to use and copy all intellectual property rights, process, specifications, reports and other document, drawings, manuals etc. provided or used by the SELECTED BIDDER / Consortium / subcontractors as part of the Scope of Works under this Agreement for the purpose of this Agreement on non-exclusive, non-transferable, perpetual, royalty-free license to use basis.
- COTS/ third party products: All Commercially off the Shelf (COTS) products and related solutions and fixes provided pursuant to this Agreement shall be licensed according to the terms of the license agreement packaged with or otherwise applicable to such products. Such licenses shall be brought on behalf of and in the name of the Authority or mentioning the Authority as the end user of such licenses.
- SELECTED BIDDER shall be responsible for arranging any licenses associated with products. "Product" means any computer code, web-based services, or materials comprising commercially released, pre-release or beta products (whether licensed for a fee or no charge) and any derivatives of the foregoing which are made available to the Purchaser for license which is published by product owner or its affiliates, or a third party. "Fixes" means product fixes that are either released generally (such as commercial product service packs) or that are provided to you when performing services (such as workarounds, patches, bug fixes, beta fixes and beta builds) and any derivatives of the foregoing. Unless otherwise specifically restricted by the Licensing Terms of the COTS products, all intellectual property rights in any development/enhancement/customization etc. done on the COTS products pursuant to this Agreement shall be owned by the Authority.
- Further, the SELECTED BIDDER shall be obliged to ensure that all approvals, registrations, licenses, permits and rights which are, inter-alia, necessary for use of the Deliverables, goods, services, applications, services etc. provided by the SELECTED BIDDER / Consortium / subcontractors under this Agreement shall be acquired in the name of the Authority and to use such licenses till the Term on behalf of the Authority solely for the purpose of execution of any of its obligations under the terms of this Agreement. However, subsequent to the term of this Agreement, such approvals etc. shall endure to the exclusive benefit of the Authority.
- SELECTED BIDDER shall not copy, reproduce, translate, adapt, vary, modify, disassemble, decompile or reverse engineer or otherwise deal with or cause to reduce the value of the Materials except as expressly authorized by Authority in writing.

1.20 Taxes

- SELECTED BIDDER shall bear all personnel taxes levied or imposed on its personnel, or any other member of SELECTED BIDDER's Team, etc. on account of payment received under this Contract. SELECTED BIDDER shall bear all corporate taxes, levied or imposed on SELECTED BIDDER on account of payments received by it from the Authority for the work done under this Contract.
- SELECTED BIDDER shall bear all taxes and duties etc. levied or imposed on SELECTED BIDDER under the Contract including but not limited to Sales Tax, Customs duty, Excise duty, Octroi, Service Tax, GST and relevant amendments Works Contracts Tax and all Income Tax levied under Indian Income Tax Act – 1961 or any amendment thereof during the entire contract period, i.e., on account of material supplied and services rendered and payments received by him from the Authority under the Contract. It shall be the responsibility of SELECTED BIDDER to submit to the concerned Indian authorities the returns and all other connected documents required for this purpose. SELECTED

BIDDER shall also provide the Authority such information, as it may be required in regard to SELECTED BIDDER's details of payment made by the Authority under the Contract for proper assessment of taxes and duties. The amount of tax withheld by the Authority shall at all times be in accordance with Indian Tax Law and the Authority shall promptly furnish to SELECTED BIDDER original certificates for tax deduction at source and paid to the Tax Authorities.

- SELECTED BIDDER agrees that he shall comply with the Indian Income Tax Act in force from time to time and pay Indian Income Tax, as may be imposed/levied on them by the Indian Income Tax Authorities, for the payments received by them for the works under the Contract
- SELECTED BIDDERs shall fully familiarize themselves about the applicable domestic taxes (such as value added or sales tax, service tax, income taxes, duties, fees, levies, etc.) on amounts payable by the Authority under the Agreement. All such taxes must be included by Bidders in the financial proposal. (Bidder to find out applicable taxes for the components being proposed.)
- Should SELECTED BIDDER fail to submit returns/pay taxes in times as stipulated under applicable Indian/State Tax Laws and consequently any interest or penalty is imposed by the concerned authority, SELECTED BIDDER shall pay the same. SELECTED BIDDER shall indemnify Authority against any and all liabilities or claims arising out of this Contract for such taxes including interest and penalty by any such Tax Authority may assess or levy against the Authority/Prime Bidder.
- The Sales Tax/VAT on works (central or state) if levied on supplies made from indigenous vendors for the works shall be borne by SELECTED BIDDER within the Contract Price. Service Tax/Terminal Sales Tax/Works Contract Tax, etc., if any applicable, shall be payable extra, at actuals by the Authority in accordance with the conditions of the Contract and upon submission of proof of payment of such taxes.
- The Authority shall if so required by applicable laws in force, at the time of payment, deduct income tax payable by SELECTED BIDDER at the rates in force, from the amount due to SELECTED BIDDER and pay to the concerned tax authority directly.

1.21 Indemnity

- SELECTED BIDDER shall indemnify the Authority from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind howsoever suffered, arising or incurred inter alia during and after Contract period out of: any negligence or wrongful act or omission by SELECTED BIDDER or any third party associated with SELECTED BIDDER in connection with or incidental to this Contract; or
- any infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied goods and related services or any part thereof
- Regardless of anything contained (except for SELECTED BIDDER's liability for bodily injury arising out of gross negligence or wilful misconduct for which it is legally liable and it's liability for patent and copyright infringement in accordance with the terms of this Agreement) the total liability of SELECTED BIDDER, is restricted to the total value of the contract and SELECTED BIDDER is not responsible for any third party claims.

1.22 Warranty

- A comprehensive warranty applicable on goods supplied under this contract shall be provided for the remaining period of contract from the date of acceptance of respective system by the Authority.
- **During the entire O&M period under the contract, in case of any requirement of replacement of any component/software/license/any upgradation requirement which may arise due to any reason, the Selected Bidder will carry out required replacement without any cost to GSCDL. It must be ensured that the replacement component is of similar specification and functionality or higher. GSCDL's approval has to be taken before replacement is carried out.**

The O&M support must be comprehensive in nature. The replacement should not affect the existing integration and SLAs.

- Technical Support for Software applications shall be provided by the respective OEMs for the period of contract. The Technical Support should include all upgrades, updates and patches to the respective Software applications.
- The SELECTED BIDDER warrants that the Goods supplied under the Contract are new, non-refurbished, unused and recently manufactured; shall not be nearing End of sale/End of support; and shall be supported by the SELECTED BIDDER and respective OEM along with service and spares support to ensure its efficient and effective operation for the entire duration of the contract (i.e 24 months)
- The SELECTED BIDDER warrants that the goods supplied under this contract shall be of the highest grade and quality and consisted with the established and generally accepted standards for materials of this type. The goods shall be in full conformity with the specifications and shall operate properly and safely. All recent design improvements in goods, unless provided otherwise in the Contract, shall also be made available.
- The SELECTED BIDDER further warrants that the Goods supplied under this Contract shall be free from all encumbrances and defects/faults arising from design, material, manufacture or workmanship (except insofar as the design or material is required by the Authority's Specifications) or from any act or omission of the SELECTED BIDDER, that may develop under normal use of the supplied Goods in the conditions prevailing at the respective Datacenter/Server Room Sites.
- The Authority shall promptly notify the SELECTED BIDDER in writing of any claims arising under this warranty.
- Upon receipt of such notice, the SELECTED BIDDER shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the Authority may have against the SELECTED BIDDER under the Contract.
- If the SELECTED BIDDER, having been notified, fails to remedy the defect(s) within a reasonable period, the Authority may proceed to take such remedial action as may be necessary, at the SELECTED BIDDER's risk and expense and without prejudice to any other rights which the Authority may have against the SELECTED BIDDER under the Contract.
- Any OEM specific warranty terms that do not conform to conditions under this Contract shall not be acceptable.

1.23 Term and Extension of the Contract

- The Contract period shall commence from the date of signing of contract or Issuance of LoI, whichever is earlier, and shall remain valid for 24 Months from the date of signing of contract.
- If the delay occurs due to circumstances beyond control of SELECTED BIDDER such as strikes, lockouts, fire, accident, defective materials, delay in approvals or any cause whatsoever beyond the reasonable control of SELECTED BIDDER, a reasonable extension of time shall be granted by the Authority.
- The Authority shall reserve the sole right to grant any extension to the term abovementioned and shall notify in writing to SELECTED BIDDER, at least 3 (three) months before the expiration of the Term hereof, whether it shall grant SELECTED BIDDER an extension of the Term. The decision to grant or refuse the extension shall be at the Authority's discretion and such extension of the contract, if any, shall be as per terms agreed mutually between the Authority and SELECTED BIDDER.
- Where the Authority is of the view that no further extension of the term be granted to SELECTED BIDDER, the Authority shall notify SELECTED BIDDER of its decision at least 3 (three) months prior to the expiry of the Term. Upon receipt of such notice, SELECTED BIDDER shall continue to perform all its obligations hereunder, until such reasonable time beyond the Term of the Contract within

which, the Authority shall either appoint an alternative agency/SELECTED BIDDER or create its own infrastructure to operate such Services as are provided under this Contract.

1.24 Dispute Resolution

- In case, a dispute is referred to arbitration, the arbitration shall be under the Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re- enactment thereof.
- If during the subsistence of this Contract or thereafter, any dispute between the Parties hereto arising out of or in connection with the validity, interpretation, implementation, material breach or any alleged material breach of any provision of this Contract or regarding any question, including as to whether the termination of this Contract by one Party hereto has been legitimate, the Parties hereto shall endeavor to settle such dispute amicably and/or by Conciliation to be governed by the Arbitration and Conciliation Act, 1996 or as may be agreed to between the Parties. 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 thirty (30) days, gives thirty (30) day notice to refer the dispute to arbitration to the other Party in writing.
- The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.
    - The Arbitration proceedings shall be held in Gandhinagar, Gujarat, India.
    - The Arbitration proceeding shall be governed by the substantive laws of India.
    - The proceedings of Arbitration shall be in Hindi/English language.
- Except as otherwise provided elsewhere in the contract if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof the same shall be referred to a Tribunal of three (3) Arbitrators, constituted as per the terms of and under the (Indian) Arbitration and Conciliation Act, 1996. Each party to the contract shall appoint/nominate one Arbitrator each, the two Arbitrators so appointed/nominated by the Parties herein shall together choose the third Arbitrator, who shall be the Presiding Arbitrator of the Tribunal. The consortium of the three Arbitrators shall form the Arbitral Tribunal.
- In case, a party fails to appoint an arbitrator within 30 days from the receipt of the request to do so by the other party or the two Arbitrators so appointed fail to agree on the appointment of third Arbitrator within 30 days from the date of their appointment upon request of a party, the Chief Justice of the Gujarat High Court or any person or institution designated by him shall appoint the Arbitrator/Presiding Arbitrator upon request of one of the parties.
- Any letter, notice or other communications dispatched to SELECTED BIDDER relating to either arbitration proceeding or otherwise whether through the post or through a representative on the address last notified to the Authority by SELECTED BIDDER shall be deemed to have been received by SELECTED BIDDER although returned with the remarks, refused 'undelivered' where about not known or words to that effect or for any other reasons whatsoever
- If the Arbitrator so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the Authority to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
- It is a term of the contract that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.
- It is also a term of the contract that neither party to the contract shall be entitled for any interest on the amount of the award.
- The Arbitrator shall give reasoned award and the same shall be final, conclusive and binding on the parties.
- The fees of the arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the parties.

1.25 Conflict Resolution

SELECTED BIDDER shall disclose to the Authority in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for SELECTED BIDDER or SELECTED BIDDER's Team) in the course of performing the Services as soon as practical after it becomes aware of that conflict.

1.26 Publicity

SELECTED BIDDER shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Authority first gives SELECTED BIDDER its written consent.

1.27 Force Majeure

Force Majeure shall not include any events caused due to acts/omissions of SELECTED BIDDER resulting in a breach/contravention of any of the terms of the Contract and/or SELECTED BIDDER's Bid. It shall also not include any default on the part of SELECTED BIDDER due to its negligence or failure to implement the stipulated/proposed precautions, as were required to be taken under the Contract.

The failure or occurrence of a delay in performance of any of the obligations of either party shall constitute a Force Majeure event only where such failure or delay could not have reasonably been foreseen i.e. war, or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, Vandalism(due to Law & Order situation), Terrorism, explosions, epidemics, quarantine restriction, strikes, lockouts or act of God (hereinafter referred to as events) , or where despite the presence of adequate and stipulated safeguards the failure to perform obligations has occurred at any location in scope. In such an event, the affected party shall inform the other party in writing within five days of the occurrence of such event. Any failure or lapse on the part of SELECTED BIDDER in performing any obligation as is necessary and proper, to negate the damage due to projected force majeure events or to mitigate the damage that may be caused due to the above mentioned events or the failure to provide adequate disaster management/recovery or any failure in setting up a contingency mechanism would not constitute force majeure, as set out above.

In case of a Force Majeure, all Parties shall endeavor to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure.

1.28 Delivery

SELECTED BIDDER shall bear the cost for packing, transport, insurance, storage and delivery of all the goods for "Request for Proposal (RFP) for Selection of Agency for Comprehensive Operations and Maintenance of Smart City Components, GIS and Integrated Command & Control Center of Gandhinagar Smart City Development Limited " at all locations identified by the Authority in Gandhinagar.

The Goods and manpower supplied under this Contract shall conform to the standards mentioned in the RFP, and, when no applicable standard is mentioned, to the authoritative standards; such standard shall be approved by Authority.

SELECTED BIDDER shall only procure the hardware and software after approvals from a designated Committee/Authority.

1.29 Insurance

- The Goods supplied under this Contract/all components under O&M shall be comprehensively insured by SELECTED BIDDER at his own cost, against any loss or damage, for the entire period of the contract. SELECTED BIDDER shall submit to the Authority, documentary evidence issued by the insurance company, indicating that such insurance has been taken.
- SELECTED BIDDER shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the goods and also 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 SELECTED BIDDER.
- SELECTED BIDDER shall take out and maintain at its own cost, on terms and conditions approved by the Authority, insurance against the risks, and for the coverage's, as specified below;

    - At the Authority's request, shall provide evidence to the Authority showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.
    - Employer's liability and workers' compensation insurance in respect of the Personnel of the Company, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate

1.30 Transfer of Ownership

SELECTED BIDDER must transfer all titles to the assets and goods procured for the purpose of the project to the Authority at the time of Acceptance of System. This includes all licenses, titles, source code, certificates, hardware, devices, equipment's etc. related to the system designed, developed, installed and maintained by SELECTED BIDDER. SELECTED BIDDER is expected to provide source code, transfer IPR and ownership right of only those solutions which would be customized by bidder for the use of Gandhinagar Smart City Development Limited. For any pre-existing work, SELECTED BIDDER and Gandhinagar Smart City Development Limited shall be held jointly responsible and its use in any other project by SELECTED BIDDER shall be decided on mutual consent.

Forthwith upon expiry or earlier termination of the Contract and at any other time on demand by the Authority, SELECTED BIDDER shall deliver to the Authority all Documents provided by or originating from the Authority and all Documents produced by or from or for SELECTED BIDDER in the course of performing the Services, unless otherwise directed in writing by the Authority at no additional cost. SELECTED BIDDER shall not, without the prior written consent of the Authority store, copy, distribute or retain any such Documents.

1.31 Exit Management Plan

- An Exit Management plan shall be furnished by SELECTED BIDDER in writing to the Authority within 90 days from the date of signing the Contract, which shall deal with at least the following aspects of exit management in relation to the contract as a whole and in relation to the Project Implementation, and Service Level monitoring.

    - A detailed program of the transfer process that could be used in conjunction with a Replacement Service Provider including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;
    - Plans for provision of contingent support to Project and Replacement Service Provider for a reasonable period after transfer.
    - Exit Management plan in case of normal termination of Contract period

  - Exit Management plan in case of any eventuality due to which Project is terminated before the contract period.
  - Exit Management plan in case of termination of SELECTED BIDDER

- Exit Management plan at the minimum adhere to the following:

  - Three (3) months of the support to Replacement Service Provider post termination of the Contract
  - Complete handover of the Planning documents, bill of materials, functional requirements specification, technical specifications of all equipment, change requests if any, sources codes, wherever applicable, reports, documents and other relevant items to the Replacement Service Provider/Authority
  - Certificate of Acceptance from authorized representative of Replacement Service Provider issued to SELECTED BIDDER on successful completion of handover and knowledge transfer

- In the event of termination or expiry of the contract, Project Implementation, or Service Level monitoring, both Bidder and Authority shall comply with the Exit Management Plan.
- During the exit management period, SELECTED BIDDER shall use its best efforts to deliver the services.

2. Special Conditions of Contract

2.1 Performance Security

The SELECTED BIDDER shall submit performance guarantee which is unconditional & irrevocable equal to 10% of the order value of the contract in the format prescribed in RFP issued by any of the Nationalized Banks Only. The performance guarantee shall be valid for the term agreement & shall be renewed & maintained by the SELECTED BIDDER for the term of the agreement & extension, if any. The performance guarantee shall be forfeited / liquidated by the GSCDL as a penalty in the event of failure to complete obligations or breach of any of the conditions by the SELECTED BIDDER.

2.2 Liquidated Damages

- If SELECTED BIDDER fails to adhere to SLAs as defined in the RFP, then penalty will be levied as defined under the SLA.
- The overall deduction shall not in any case exceed 10 % of the contract value. The penalties levied under any quarterly invoice submitted by Selected Bidder (based on SLA calculation) will be capped at 10% of the quarterly invoice value.
- The Authority may without prejudice to its right to effect recovery by any other method, deduct the amount of liquidated damages from any money belonging to SELECTED BIDDER in its hands (which includes the Authority's right to claim such amount against SELECTED BIDDER's Bank Guarantee) or which may become due to SELECTED BIDDER. Any such recovery or liquidated damages shall not in any way relieve SELECTED BIDDER from any of its obligations to complete the Work or from any other obligations and liabilities under the Contract.
- Delay not attributable to SELECTED BIDDER shall be considered for exclusion for the purpose of computing liquidated damages.

2.3 Limitation of Liability:

- Limitation of Bidder's Liability towards the Authority:

- Neither Party shall be liable to the other Party for any indirect or consequential loss or damage (including loss of revenue and profits) arising out of or relating to the Contract.
- Except in case of gross negligence or willful misconduct on the part of SELECTED BIDDER or on the part of any person or company acting on behalf of SELECTED BIDDER in carrying out the Services,

- SELECTED BIDDER, with respect to damage caused by SELECTED BIDDER to Authority's property, shall not be liable to Authority:

  - For any indirect or consequential loss or damage; and
  - For any direct loss or damage that exceeds the total payments payable under the Contract to SELECTED BIDDER hereunder,

- This limitation of liability shall not affect SELECTED BIDDER liability, if any, for damage to Third Parties caused by SELECTED BIDDER or any person or company acting on behalf of SELECTED BIDDER in carrying out the Services.

2.4 Ownership and Retention of Documents

- The Authority shall own the Documents, prepared by or for SELECTED BIDDER arising out of or in connection with the Contract.
- Forthwith upon expiry or earlier termination of this Contract and at any other time on demand by the Authority, SELECTED BIDDER shall deliver to the Authority all documents provided by or originating from the Authority and all documents produced by or for SELECTED BIDDER in the course of performing the Services, unless otherwise directed in writing by the Authority at no additional cost. SELECTED BIDDER shall not, without the prior written consent of the Authority store, copy, distribute or retain any such documents.

2.5 Information Security

- SELECTED BIDDER shall not carry any written/printed document, layout diagrams, CD, hard disk, storage tapes, other storage devices or any other goods/material proprietary to Authority into/out of any location without written permission from the Authority.
- SELECTED BIDDER shall not destroy any unwanted documents, defective tapes/media present at any location on their own. All such documents, tapes/media shall be handed over to the Authority.
- All documentation and media at any location shall be properly identified, labeled and numbered by SELECTED BIDDER. SELECTED BIDDER shall keep track of all such items and provide a summary report of these items to the Authority whenever asked for.
- Access to Authority's data and systems, Internet facility by SELECTED BIDDER at any location shall be in accordance with the written permission by the Authority. The Authority shall allow SELECTED BIDDER to use facility in a limited manner subject to availability. It is the responsibility of SELECTED BIDDER to prepare and equip himself in order to meet the requirements.
- SELECTED BIDDER must acknowledge that Authority's business data and other Authority proprietary information or materials, whether developed by Authority or being used by Authority pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to Authority; and SELECTED BIDDER along with its team agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than that used by SELECTED BIDDER to protect its own proprietary information. SELECTED BIDDER recognizes that the goodwill of Authority depends, among other things, upon SELECTED BIDDER keeping such

proprietary information confidential and that unauthorized disclosure of the same by SELECTED BIDDER or its team could damage the goodwill of Authority, and that by reason of SELECTED BIDDER's duties hereunder. SELECTED BIDDER may come into possession of such proprietary information, even though SELECTED BIDDER does not take any direct part in or furnish the services performed for the creation of said proprietary information and shall limit access thereto to employees with a need to such access to perform the services required by this agreement. SELECTED BIDDER shall use such information only for the purpose of performing the said services.

- SELECTED BIDDER shall, upon termination of this agreement for any reason, or upon demand by Authority, whichever is earliest, return any and all information provided to SELECTED BIDDER by Authority, including any copies or reproductions, both hardcopy and electronic.
- By virtue of the Contract, SELECTED BIDDER team may have access to personal information of the Authority and/or a third party. The Authority has the sole ownership of and the right to use, all such data in perpetuity including any data or other information pertaining to the citizens that may be in the possession of SELECTED BIDDER team in the course of performing the Services under the Contract

2.6 Records of contract documents

- SELECTED BIDDER shall at all-time make and keep sufficient copies of the process manuals, operating procedures, specifications, Contract documents and any other documentation for him to fulfil his duties under the Contract.
- SELECTED BIDDER shall keep on the Site at least three copies of each and every specification and Contract Document, in excess of his own requirement and those copies shall be available at all times for use by the Authority's Representative and by any other person authorized by the Authority's Representative.

2.7 Security and Safety

SELECTED BIDDER shall comply with the directions issued from time to time by the Authority and the standards related to the security and safety, in so far as it applies to the provision of the Services.

SELECTED BIDDER shall upon reasonable request by the Authority, or its nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.

2.8 Confidentiality

- SELECTED BIDDER shall not, either during the term or after expiration of this Contract, disclose any proprietary or confidential information relating to the Services/Contract and/or Authority's business/operations, information, Application/software, hardware, business data, architecture schematics, designs, storage media and other information/documents without the prior written consent of the Authority.
- The Authority reserves the right to adopt legal proceedings, civil or criminal, against SELECTED BIDDER in relation to a dispute arising out of breach of obligation by SELECTED BIDDER under this clause.
- SELECTED BIDDER shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidentiality agreement with the Authority to the satisfaction of the Authority.
- SELECTED BIDDER shall notify the Authority promptly if it is aware of any disclosure of the Confidential Information otherwise than as permitted by the Contract or with the authority of the Authority.

- SELECTED BIDDER shall be liable to fully recompense the Authority for any loss of revenue arising from breach of confidentiality.

2.9 Events of Default by Selected Bidder

- The failure on the part of SELECTED BIDDER to perform any of its obligations or comply with any of the terms of this Contract shall constitute an Event of Default on the part of SELECTED BIDDER. The events of default are but not limited to:
  - SELECTED BIDDER/Bidder's Team has failed to perform any instructions or directives issued by the Authority which it deems proper and necessary to execute the scope of work or provide services under the Contract, or
  - SELECTED BIDDER/Bidder's Team has failed to confirm/adhere to any of the key performance indicators as laid down in the Key Performance Measures/Service Levels, or if SELECTED BIDDER has fallen short of matching such standards/benchmarks/targets as the Authority may have designated with respect to the system or any goods, task or service, necessary for the execution of the scope of work and performance of services under this Contract. The above mentioned failure on the part of SELECTED BIDDER may be in terms of failure to adhere to performance, quality, timelines, specifications, requirements or any other criteria as defined by the Authority;
  - SELECTED BIDDER has failed to remedy a defect or failure to perform its obligations in accordance with the specifications issued by the Authority, despite being served with a default notice which laid down the specific deviance on the part of SELECTED BIDDER/SELECTED BIDDER's Team to comply with any stipulations or standards as laid down by the Authority; or
  - SELECTED BIDDER/SELECTED BIDDER's Team has failed to adhere to any amended direction, instruction, modification or clarification as issued by the Authority during the term of this Contract and which the Authority deems proper and necessary for the execution of the scope of work under this Contract.
  - SELECTED BIDDER/SELECTED BIDDER's Team 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 Bid, the RFP and this Contract.
  - There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to SELECTED BIDDER.
  - SELECTED BIDDER/Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.
- Where there has been an occurrence of such defaults inter alia as stated above, the Authority shall issue a notice of default to SELECTED BIDDER, setting out specific defaults / deviances / omissions / non-compliances / non-performances and providing a notice of thirty (30) days to enable such defaulting party to remedy the default committed.
- Where despite the issuance of a default notice to SELECTED BIDDER by the Authority, SELECTED BIDDER fails to remedy the default to the satisfaction of the Authority, the Authority may, where it deems fit, issue to the defaulting party another default notice or proceed to contract termination.

2.10 Termination

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

- Where the Authority is of the opinion that there has been such Event of Default on the part of SELECTED BIDDER/SELECTED BIDDER's Team which would make it proper and necessary to terminate this Contract and may include failure on the part of 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.

- Where it comes to the Authority's attention that SELECTED BIDDER (or SELECTED BIDDER's Team) is in a position of actual conflict of interest with the interests of the Authority, in relation to any of terms of SELECTED BIDDER's Bid, the RFP or this Contract.
- Where 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 SELECTED BIDDER, any failure by SELECTED BIDDER to pay any of its dues to its creditors, the institution of any winding up proceedings against SELECTED BIDDER or the happening of any such events that are adverse to the commercial viability of SELECTED BIDDER. In the event of the happening of any events of the above nature, the Authority shall reserve the right to take any steps as are necessary, to ensure the effective transition of the sites pilot site to a successor agency, and to ensure business continuity.
- Termination for Insolvency: The Authority may at any time terminate the Contract by giving written notice to SELECTED BIDDER, without compensation to SELECTED BIDDER, if 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 Authority.
- SELECTED BIDDER may, subject to approval by the Authority, terminate this Contract before the expiry of the term by giving the Authority a prior and written notice at least 3 months in advance indicating its intention to terminate the Contract.
- In case of deliverables/ milestone which is approved by GSCDL and payment is undisputed, the SELECTED BIDDER may terminate this contract in case of non-payment after 90 days of serving the notice to GSCDL.

2.11 Consequence of Termination

- In the event of termination of the Contract due to any cause whatsoever, whether consequent to the stipulated Term of the Contract or otherwise the Authority shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the project which SELECTED BIDDER shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow and provide all such assistance to the Authority and/or the successor agency/service provider, as may be required, to take over the obligations of SELECTED BIDDER in relation to the execution/continued execution of the requirements of the Contract.
- Where the termination of the Contract is prior to its stipulated term on account of a Default on the part of SELECTED BIDDER or due to the fact that the survival of SELECTED BIDDER as an independent corporate entity is threatened/has ceased, or for any other reason, whatsoever, the Authority, through unilateral re-determination of the consideration payable to SELECTED BIDDER, shall pay SELECTED BIDDER for that part of the Services which have been authorized by the Authority and satisfactorily performed by SELECTED BIDDER up to the date of termination. Without prejudice to any other rights, the Authority may retain such amounts from the payment due and payable by the Authority to SELECTED BIDDER as may be required to offset any losses caused to the Authority as a result of any act/omissions of SELECTED BIDDER. In case of any loss or damage due to default on the part of SELECTED BIDDER in performing any of its obligations with regard to executing the Schedule of Requirements under the contract, SELECTED BIDDER shall compensate the Authority for any such loss, damages or other costs, incurred by the Authority. Additionally, members of its team shall perform all its obligations and responsibilities under the Contract in an identical manner as were being performed before the collapse of 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 Authority and as may be

proper and necessary to execute the Schedule of Requirements under the Contract in terms of SELECTED BIDDER's Bid, the Bid Document and the Contract

- Nothing herein shall restrict the right of the Authority to invoke the Bank Guarantee and other Guarantees furnished hereunder and pursue such other rights and/or remedies that may be available to the Authority under law.
- The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

2.12 Change Control Note

- This applies to and describes the procedure to be followed in the event of any proposed change to contract, site Implementation, and Service levels. Such change shall include, but shall not be limited to, changes in the scope of services provided by SELECTED BIDDER and changes to the terms of payment.
- Change requests in respect of the contract, the site implementation, or the Service levels shall emanate from the Parties' representative who shall be responsible for obtaining approval for the change and who shall act as its sponsor throughout the Change Control Process and shall complete Part A of the CCN (Annex I, Section 3 of the RFP). CCNs shall be presented to the other Party's representative who shall acknowledge receipt by signature of the authorized representative of the Authority.
- SELECTED BIDDER and the Authority while preparing the CCN, shall consider the change in the context of whether the change is beyond the scope of Services including ancillary and concomitant services required. The CCN shall be applicable for the items which are beyond the stated/implied scope of work as per the RFP document.
- SELECTED BIDDER shall assess the CCN and complete Part B of the CCN. In completing Part B of the CCN SELECTED BIDDER/Lead Bidder shall provide as a minimum:
    - a description of the change;
    - a list of deliverables required for implementing the change;
    - a timetable for implementation;
    - an estimate of any proposed change; o any relevant acceptance criteria;
    - an assessment of the value of the proposed change;
    - Material evidence to prove that the proposed change is not already covered within the scope of the RFP, Agreement and Service Levels.
- Prior to submission of the completed CCN to the Authority or its nominated agencies, SELECTED BIDDER shall undertake its own internal review of the proposal and obtain all necessary internal approvals. As a part of this internal review process, SELECTED BIDDER shall consider the materiality of the proposed change in the context of the Agreement, the sites, Service levels affected by the change and the total effect that may arise from implementation of the change.
- Each Party shall be responsible for its own costs incurred in the quotation, preparation of CCNs and in the completion of its obligations described in this process provided SELECTED BIDDER meets the obligations as set in the CCN. In the event SELECTED BIDDER is unable to meet the obligations as defined in the CCN then the cost of getting it done by third party shall be borne by SELECTED BIDDER. Change requests and CCNs shall be reported monthly to each Party's representative who shall prioritize and review progress.

2.13 Milestones and payment Schedule

The Selected bidder will be required to adhere to the SLA and provide O&M support for a period of 2 years

Milestones	Payment Milestones	Payment Schedule
M1	Year 1 Payment for O&M	Equal Quarterly O&M Payments
M2	Year 2 Payment for O&M	Equal Quarterly O&M Payments

Authority shall make payments to SELECTED BIDDER at the times and in the manner set out in the Milestones and Payment Schedule for Operations and Maintenance a subject to the penalties as per SLA calculation. Authority shall make all efforts to make payments to SELECTED BIDDER within 45 days of receipt of invoice(s) and all necessary supporting documents. No interest will be payable.

All payments agreed to be made by Authority to SELECTED BIDDER in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable, if any, and Authority shall not be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services.

No invoice for extra work/change order on account of change order shall be submitted by SELECTED BIDDER unless the said extra work/change order has been authorized/approved by the Authority in writing
In the event of Authority noticing at any time that any amount has been disbursed wrongly to SELECTED BIDDER or any other amount is due from SELECTED BIDDER to the Authority, the Authority may without prejudice to its rights recover such amounts by other means after notifying SELECTED BIDDER or deduct such amount from any payment falling due to SELECTED BIDDER. The details of such recovery, if any, shall be intimated to SELECTED BIDDER. SELECTED BIDDER shall receive the payment of undisputed amount under subsequent invoice for any amount that has been omitted in previous invoice by mistake on the part of the Authority or SELECTED BIDDER.

All payments to SELECTED BIDDER shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under any law, rule or regulation. All costs, damages or expenses which Authority may have paid or incurred, for which under the provisions of the Contract, SELECTED BIDDER is liable, the same shall be deducted by Authority from any dues to SELECTED BIDDER.

All payments to SELECTED BIDDER shall be made after making necessary deductions as per terms of the Contract and recoveries towards facilities, if any, provided by the Authority to SELECTED BIDDER on chargeable basis.

3. Service Levels

3.1 Purpose

The purpose is to define the levels of service provided by SELECTED BIDDER to the Authority for the duration of the contract. The benefits of this are:

- Start a process that applies to Authority and SELECTED BIDDER attention to some aspect of performance, only when that aspect drops below the threshold defined by the Authority.
- Help the Authority control the levels and performance of SELECTED BIDDER's services.
- The Service Levels are between the Authority and SELECTED BIDDER.

3.2 Service Level Agreements & Targets

- This section is agreed to by Authority and SELECTED BIDDER as the key performance indicator for the project. This may be reviewed and revised according to the procedures detailed in Service Level Change Control.
- The following section reflects the measurements to be used to track and report system's performance on a regular basis. The targets shown in the following tables are for the period of contact.
- The procedures in Service Level Change Control shall be used if there is a dispute between Authority and SELECTED BIDDER on what the permanent targets should be.

3.3 General Principles of Service level Agreements

The Service Level agreements have been logically segregated in the following categories:

3.3.1 Service Level Agreements

- Service Level Agreement (SLA) shall become the part of contract between GSCDL and the successful bidder. SLA defines the terms of the successful bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section.
- The successful bidder has to comply with service level requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this contract i.e. for a period of 2 years of Operation and Maintenance. The successful bidder has to supply appropriate software/hardware/automated tools as may be required to monitor and submit reports of all the SLAs mentioned in this section.
- For purposes of the SLA, the definitions and terms as specified in the document along with the following terms shall have the meanings set forth below:
    - "Total Time" - Total number of hours in the quarter (or the concerned period) being considered for evaluation of SLA performance.
    - "Uptime" – Time period for which the specified services/outcomes are available in the period being considered for evaluation of SLA. Formulae for calculation of Uptime: Uptime (%) = {1-[(Downtime)/(Total time scheduled maintenance time)]}*100
    - "Downtime"- Time period for which the specified services/components/outcomes are not available in the concerned period, being considered for evaluation of SLA, which would exclude downtime owing to Force Majeure & Reasons beyond control of the successful bidder.
    - "Scheduled Maintenance Time" - Time period for which the specified services/components with specified technical and service standards are not available due to scheduled maintenance activity. The successful bidder is required to take at least 10 days prior approval from GSCDL for any such activity. The scheduled maintenance should be carried out during non-peak hours (like post mid-night, and should not be for more than 4 hours. Such planned downtime would be granted max 4 times a year.
    - "Incident" - Any event/abnormalities in the service being rendered, that may lead to disruption in normal operations and services to the end user.
    - "Response Time" - Time elapsed from the moment an incident is reported in the Helpdesk over phone or by any applicable mode of communication, to the time when a resource is assigned for the resolution of the same.
    - "Resolution Time" - Time elapsed from the moment incident is reported to Helpdesk either in person or automatically through system, to the time by which the incident is resolved completely and services as promised are restored.

3.3.2 Measurement of SLAs

The SLA metrics provided specifies performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on quarterly basis. The SLA also specifies the liquidated damages for lower performance and breach conditions.

Payment to the SELECTED BIDDER is linked to the compliance with the SLA metrics. The matrix specifies three levels of performance, namely,

- The SELECTED BIDDER will get 100% of the Contracted value if all the baseline performance metrics are compiled and the cumulative credit points are 100
- The SELECTED BIDDER will get lesser payment in case of the lower performance. (For e.g. if SLA point score is 80 then the SELECTED BIDDER will get 20% less on the quarterly payment – The formula calculating the deductions is "(100 – SLA Point Score)%")
- If the performance of the Agency in respect of any parameter falls below the prescribed lower performance limit, debit points are imposed for the breach.
- The credit (+) points earned during the quarter will be considered for computing penalty. The quarterly payment shall be made after deducting the liquidated damages as mentioned above.
- The aforementioned SLA parameters shall be measured as per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SELECTED BIDDER and approved and audited by GSCDL or its appointed Consultant for accuracy and reliability.
- GSCDL shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters. The SLAs defined, shall be reviewed by GSCDL on an bi-annual basis after consulting the SELECTED BIDDER, Project Management Consultants and other experts. All the changes would be made by GSCDL after consultation with the SELECTED BIDDER and might include some corrections to reduce undue relaxation in Service levels or some corrections to avoid unrealistic imposition of liquidated damages, which are noticed.
- Total penalty to be levied on the SELECTED BIDDER shall be capped at 10% of the total contract value. However, GSCDL would have right to invoke termination of the contract in case the overall liquidated damages equals 10% of total contract value.
- The overall deduction shall not in any case exceed 10 % of the contract value. The penalties levied under any quarterly invoice submitted by Selected Bidder (based on SLA calculation) will be capped at 10% of the quarterly invoice value. GSCDL would also have right to invoke termination of contract in case penalty is levied at 10% for 2 successive quarters.

3.3.3 SLAs applicable under this project

- These SLAs shall be used to evaluate the performance of the services on monthly basis.
- Penalty levied for non- performance as per SLA requirements shall be deducted through subsequent payments due from GSCDL or through the Performance Bank Guarantee.
- The SLA parameters shall be measured for each of the sub systems' SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools. All such required tools should be provided by the successful bidder. GSCDL will have the authority to audit these tools for accuracy and reliability.
- The upper limit of penalty would be capped at 10% of the opex value for each quarter. In case the calculated penalty crosses 10% penalty of the opex value in 2 subsequent quarters, GSCDL reserves the right to invoke the termination clause.
- SLA Matrix is provided in **Annexure 20**

3.3.4 Conditions for No Penalties

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

- There is a force majeure event effecting the SLA which is beyond the control of the successful bidder. Force Majeure events shall be considered in line with the clause mentioned RFP.
- The non-compliance to the SLA has been due
- To reasons beyond the control of the successful bidder. Decision of the authority with regards to incidents beyond the control of the successful bidder will be final
- Theft cases by default/vandalism would not be considered as "beyond the control of bidder". Hence, the Bidder should be taking adequate anti-theft measures, spares strategy, Insurance as required to maintain the desired Required SLA.
- In case of any component damage due to external hits, accidents etc. the replacement/repair will be under the scope of bidder. No cost will be borne/shared by the authority. Successful bidder is expected to have insurance cover for all components.
- It is also made clear that incidents like cable cuts caused due to any third party interventions, no exceptions in downtime will be considered by the authority and applicable penalty will be levied.

3.4 Reporting Procedures

- SELECTED BIDDER representative shall prepare and distribute Service level performance reports in a mutually agreed format by the 5th working day of subsequent month. The reports shall include "actual versus target" Service Level Performance, a variance analysis and discussion of appropriate issues or significant events. Performance reports shall be distributed to Authority management personnel as directed by Authority.
- Preventive maintenance conducted during the month must also be sent with logs. Complete inventory with location wise components/subcomponents along with Lat long, updated serial numbers, make, model, firmware details, country of origin, application details, license details etc to be provided
- Any report required by the authority from time to time related to the project must be provided (in hard copy and soft copy as required)
- Selected Bidder must also conduct trainings related to components, applications, software etc. for stakeholders
- Also, SELECTED BIDDER may be required to get the Service Level performance report audited by a third-party Auditor appointed by the Authority.

3.5 Issue Management Procedures

3.5.1 General

- This process provides an appropriate management structure for the orderly consideration and resolution of business and operational issues in the event that quick consensus is not reached between Authority and Bidder.
- Implementing such a process at the beginning of the outsourcing engagement significantly improves the probability of successful issue resolution. It is expected that this pre-defined process shall only be used on an exception basis if issues are not resolved at lower management levels.

3.5.2 Issue Management Process

Either Authority or SELECTED BIDDER may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of disagreement with possible solutions.

Any unresolved issues/disputes concerning the Project/Contract between the Parties shall first be referred in writing to the Project Manager for his consideration and resolution. If the Project Manager is unable to resolve any issue/dispute within 5 days of reference to them, the Project Manager shall refer the matter to the Program Management Committee. If the Program Management Committee is unable to resolve the issues/disputes referred to them within 15 days the unresolved issue/dispute shall be referred to Steering Committee/high powered committee/Project Implementation Committee for resolution. The Steering Committee within 30 days of reference to them shall try to resolve the issue/dispute.
If the Steering Committee fails to resolve a dispute as per the above clause, the same shall be referred to arbitration. The arbitration proceedings shall be carried out as per the Arbitration procedures mentioned in Clause 8.2.4 of this section of RFP.

3.6 Service Level Change Control

3.6.1 General

- It is acknowledged that this Service levels may change as Authority's business needs evolve over the course of the contract period. As such, this document also defines the following management procedures:
    - A process for negotiating changes to the Service Levels
    - An issue management process for documenting and resolving particularly difficult issues.
    - Authority and Bidder management escalation process to be used in the event that an issue is not being resolved in a timely manner by the lowest possible level of management.
- Any changes to the levels of service provided during the term of this Agreement shall be requested, documented and negotiated in good faith by both parties.
- Either party can request a change.
- Service Level Change Process: The parties may amend Service Level by mutual agreement in accordance. Changes can be proposed by either party .Unresolved issues shall also be addressed. SELECTED BIDDER's representative shall maintain and distribute current copies of the Service Level document as directed by Authority.
- Additional copies of the current Service Levels shall be available at all times to authorized parties.
- Version Control/Release Management: All negotiated changes shall require changing the version control number. As appropriate, minor changes may be accumulated for periodic release or for release when a critical threshold of change has occurred.

4. Change Control Note

Change Control Note	**CCN Number:**
Part A: Initiation	
Title	
Originator	
Sponsor	
Date of Initiation	
Details of Proposed Change	
(To include reason for change and appropriate details/specifications. Identify any attachments as A1, A2, and A3 etc.)	
Authorized by Authority	Date
Name	

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

NOW THESE PRESENTS WITNESS and the parties hereto hereby agree and declare as follows, that is to say, in consideration of the payments to be made to SELECTED BIDDER by the Authority as hereinafter mentioned, SELECTED BIDDER shall deliver the services for the said works and shall do and perform all other works and things in the Contract mentioned or described or which are implied there from or there in respectively or may be reasonably necessary for the completion of the said works within and at the times and in the manner and subject to the terms, conditions and stipulations mentioned in the said Contract.

AND in consideration of services and milestones, the Authority shall pay to SELECTED BIDDER the said sum of ……or such other sums as may become payable to SELECTED BIDDER under the provisions of this Contract, such payments to be made at such time and in such manner as is provided by the Contract.
IN WITNESS WHEREOF the parties hereto have signed this deed hereunder on the dates respectively mentioned against the signature of each.

Signed	Signed
Name	Name
Designation/Firm	Designation/Firm
Date	Date
Place	Place

In presence of

Signed	Signed
Name	Name
Designation	Designation
Date	Date
Place	Place

39. Annexure 25 Make and Model

Sn.	Line Item	Brand	Model Details
A Adaptive Traffic Control System (ATCS)			
A1	ATCS Traffic controller	Efftronics	TLCMCGH01
A2	Countdown Timer	Efftronics	TLCS03ZH01
A3	Vehicle Detector Camera	Efftronics	TLCTDBLH01
A4	Galvanized Cantilever Poles	Efftronics	TLCNCPH01
A5	Galvanized Standard Poles	Efftronics	TLCNCPH01
A6	Traffic Light Aspects - Red	Efftronics	TLCRL3H01
A7	Traffic Light Aspects - Green	Efftronics	TLCGL3H01
A8	Traffic Light Aspects - Amber	Efftronics	TLCAL3H01
A9	Pedestrian lamp heads - Stop man	Efftronics	NA
A10	Pedestrian lamp heads - walk man	Efftronics	NA
A11	Junction box/cabinets with necessary foundation and earthing	Rittal	42U, 24U
A12	Complete cabling and civil works as required including but not limited to : 50/90 mm HDPE Pipe at road crossing, island, median etc.: 90/120mm DWC pipe, 14/7 core 1.5 sqmm armoured cable: jointing, terminating, trenching, compacting, back filling as per satisfaction of GSCDL	Reputed	NA
A13	Variable Messaging Sign Board	Energasia	ENERGASIA-ESENSE eVMD2070
A14	Emergency call box	Zenitel	TCIS-5
A15	Pubic Address (PA) System	Zenitel	Alphacom XE1, ENA-2100, VLS-15TF
A16	UPS with battery backup of 1 hour	BPE	1KVA (MF1101L3)
B Traffic Enforcement System			
B1	Red Light Violation Detection (RLVD) system with complete hardware including ANPR cameras, overview cameras, local processing unit, with cabling accessories and mounting accessories and mounting infrastructure as required	Lookman-Secura	IIVASS and SP20EH5W-B04
B2	Speed Detection System for covering 2 lanes in one direction with complete sub components including ANPR camera, wide angle evidence camera, IR	Lookman-Secura	IIVASS and SIP20EH5W-B04

Sn.	Line Item	Brand	Model Details
	illuminator, non-intrusive speed sensor, with cabling and mounting infrastructure as required		
B3	Local Processing Unit (LPU) for ANPR, RLVD and SVD	Lookman-Secura	SECURA-LP
C Integrated Transport Management System (ITMS)			
C1	GPS Module for City Buses/In bus vehicle tracking system	Navika, I Triangle, Pointer	NAVIKA
C2	PIS Display - Bus (Unit of 2 Displays per bus)	Chemito	BD21691
C3	City Bus stop PIS Display Unit (LED based) and Communication units	LG	52SM5KD
C4	Bus station UPS (station UPS would require 4 hours of backup)	BPE	1KVA(MF1101L3)
C5	OBU (On bus unit)	Dynalog	Dyna-IVS-3845
C6	Inside Bus Camera (Indoor Dome Cameras)	Lookman-Secura	SIC-20E14D12
C7	Camera at Bus Stop	Lookman-Secura	SIC-20EH4W-BO2
C8	Automatic Vehicle Tracking System solution for ITMS and solid waste management with Geo tagging, Geo referencing, Geo fencing in co-ordination with the route plan for vehicle tracking	Amnex	Locomate
C9	Integration with existing AVLS	Amnex	Locomate
C10	Vehicle Planning, scheduling and dispatch system	Amnex	Locomate
C11	Web portal and mobile application	Amnex	Locomate
C12	PIS Management System	Amnex	Locomate
C13	Material supply and civil work for smart bus stops, cables networking cost including (Passive components including junction box/cabinets), earthing and lightning and surge protection	Reputed	NA
C14	Incident Management System	Amnex	Locomate
C15	Mobile DVR	Lookman-Secura	SDVR-1104-HH
D Solid Waste Management			
D1	Vehicle Tracking device	Navika, Pointer, I Triangle	NAVIKA
D2	Fill level sensors for garbage bin	Amnex	iFLS

Sn.	Line Item	Brand	Model Details
D3	Integration with existing Mobile Application for SWM supervisor	Amnex	Ecoskipper
D4	Electronic Weighbridge data controller	Amnex	NA
E. Smart Poles with all components			
E1	Panic buttons	Energasia	ePAC-2071
E2	Smart Street Light	IION	IION
E3	Wi-Fi AP	Cisco	Cisco Aironet 1562
E4	PTZ CCTV camera	Lookman-Secura	SIP-20SH5336W-P5S
E5	Variable Messaging Boards	Energasia	e-VMD/18/942d
E6	Environment Sensor	Energasia	AS-1ESNDV.12
E7	Any other	Energasia	NA
E8	Supply of smart pole with necessary foundation, electric, networking and accessories components	Energasia	EP/G/2227
E9	Junction box/cabinets with necessary foundation and earthing	Rittal	42U
E10	UPS with battery backup of 1 hour	BPE	1KVA(MF1101L3)
	WLAN Controller	Cisco	Cisco 5520
	L2 8 Port Switch	Techroutes	TRIES2512P
F. Other Smart Elements			
F4	Provisioning of Electrical power	Reputed	NA
F5	UPS with battery backup for traffic enforcement system	BPE	1KVA(MF1101L3)
F6	Junction box/cabinets with necessary foundation and earthing for traffic enforcement system	Rittal	24U
F7	Wi-Fi AP	Cisco	Cisco Aironet 1562
F8	Poles with necessary foundation for wi-fi ap	Safe Towers	NA
H. Interim command and control centre (CCC)			
H1	Video wall cubes 70/72 LED in 5 X 2 matrix	Pyrotech (8 units)/ BARCO (2 units)	LHD-70D-LED
H2	Video wall controller with wall management software	Pyrotech	PR160400IP and Proseries
H3	Audio Mixer and speaker system	Ahuja	NA
H4	Multi-function laser printer (city operations room)	Canon	IR ADVANCE 4551
H5	Plotter (city operations room)	Canon	IPF831

Sn.	Line Item	Brand	Model Details
H6	Operator workstations (city operations room, Manger Help desk, technical support, contact center, security room and war room)	Dell	Dell Precision Tower 3620 XCTO Base
H7	IP Phone	Coral	Connect 2LP
H8	Digital Set top boxes	Airtel	NA
H9	Television Set (Meeting room)	LG	NA
H10	65/70 LED Display to present critical information display	LG	65SM5KD
H11	Video conferencing unit	Polycom	Real Presence Group 500
H13	Microphone	Ahuja	NA
H14	IP PABX system	Coral	Coral IRIS IVDX
H15	PRI Modem Pair	Coral	Coral IRIS IVDX
H18	Firewall	Fortinet	FG1500D
H22	Access Control System	Matrix	NA
H23	Electrical and power cabling	Reputed	NA
H24	electrical cabling and necessary illumination devices	Reputed	NA
H25	Lan and CAT-6 cabling	Reputed	NA
H26	Public Address System	Zenitel	Alphacom XE1, ENA-2100, VLS-15TF
H27	Fire and smoke detection system	Ravel Master Electronics Limited	RE120GR VHFOV2
H28	Fixed dome cameras	Secura	SIP-20EH4537W-D4S
H29	Furniture for city operations room Operator desks	Pyrotech - work space	Pyrotech
H30	Furniture for city operations room Managers desk	Pyrotech - work space	Pyrotech
H31	Furniture for city operations room Meeting table and chairs	Pyrotech - work space	Pyrotech
H32	Furniture for help desk team	Pyrotech - work space	Pyrotech
H33	Furniture for contact center operator desks	Pyrotech - work space	Pyrotech
H34	KVM Module	ATEN	KM4116VA
H35	Network racks	Rittal	RAL9005
H36	Furniture for technical support team desks	Pyrotech - work space	Pyrotech

Sn.	Line Item	Brand	Model Details
H41	Civil work (raised floor, false ceiling, ducting, access doors, painting, partitioning etc.) 1. City management room (700 sq ft) 2. Meeting room (200 sq. ft) 3. Contact center room (200 sq. ft) 4. Technical support room/ Help desk (200 sq. ft) 5. Electrical room (100 sq. ft) 6. Storage area (100 sq. ft)	Nextnode	Nextnode
H42	Core Switch at ICCC	Cisco	N7KC7009
H44	Video management system supporting minimum 250 cameras from day one (of any make supporting open standard / ONVIF)	Mirasys / I2V	VMS V7.5
H45	Primary and secondary server with necessary hardware configuration along with required licensed operating system, for supporting current and future Video management system (VMS) requirement sizing	HPE	HPE Priliant DL360 Gen 10 Server
H46	Primary and secondary storage with necessary hardware configuration along with required licenses, for supporting current and future video management system (VMS), RLVD, ANPR, SVD requirement sizing	HPE	STRSTND
H17	DG set (For IT load only)	Mahindra Powersol	3305Gm
H19	Air conditioning for city operations room	Bluestar / Lloyd	BS3.5
H20	Comfort Air Conditioning	Bluestar	BS10
H21	UPS with battery back up of 1 hour	BPE	20 KVA (GT3320L20)
H38	8 Port L2 Industrial Grade Switch at edge location	Techroutes	TRIES2512P
H39	48 Port L3 Rack mountable top of the rack (TOR) switch at Interim ICCC	Cisco	C9300-48T-A
H40	Wireless LAN controller (Hardware / software with server) with necessary licenses	Cisco	Cisco 5520
J Viewing Centers			
J1	LED Displays (42 LED display)	LG	65SM5KD
J2	Monitoring workstations	Dell	Dell Precision Tower 3620 XCTO Base

Sn.	Line Item	Brand	Model Details
J3	Network Laser Printer (Monochrome)	Canon	IR 2530 W
J4	IP Phone	Coral	Connect 2LP
J5	Switches	Techroutes	TRIES2512P
J6	Networking/ IT racks	Rittal	42, 24U
J7	Networking cost (Passive components)	Reputed	NA
J8	electrical cabling and necessary illumination devices	Reputed	NA
J9	UPS (1 KV with 30 minutes backup)	BPE	1KVA(MF1101L3)
L. One time Services			
L4	Integration of ICCC with street lighting (19000 semi-automated)	Amnex	NA
L5	Integration of ICCC with street lighting (1000 fully automated street lights with motion sensors)	Amnex	NA
L6	Integration of ICCC with water SCADA and Smart meters	Amnex	NA
L7	Integration of ICCC with E-Healthcare	Amnex	NA
L8	Integration of ICCC with E-Learning	Amnex	NA
L9	Integration of ICCC with Smart Parking	Amnex	NA
L10	Integration of ICCC with existing Wi-Fi hotspots	Amnex	NA
L11	Integration of ICCC with Intelligent Transit Management System (ITMS)	Amnex	NA
L12	Integration of ICCC with existing city surveillance system	Amnex	NA
L13	Integration of ICCC with existing emergency call box (ECB) system	Amnex	NA
L14	Integration of ICCC with Adaptive Traffic Control System) ATCS	Amnex	NA
L16	Integration of ICCC with existing environmental sensors	Amnex	NA
L17	Integration of ICCC with GIS	Amnex	NA
L18	Integration of ICCC with Smart Governance and ERP	Amnex	NA
L19	Integration of ICCC with Solid Waste Management	Amnex	NA
L20	Integration of ICCC with Smart Poles	Amnex	NA
L21	Integration of ICCC with existing Public Addressing (PA) system	Amnex	NA

Sn.	Line Item	Brand	Model Details
L22	Integration of ICCC with existing Variable Messaging Signage (VMS)	Amnex	NA
L23	Integration of ICCC with any other system or sensors	Amnex	NA
M. General Surveillance System			
M1	Outdoor box camera	Secura	SIP-20EH4W-BO2
M2	Outdoor PTZ camera	Secura	SIP-20SH5336W-P5S
M3	IR Illuminators	Secura	SIR-1330P-I
M4	Poles for cameras and equipment	safe towers	P06M
N. OTC for Internet bandwidth at ICCC			
N1	50 Mbps	GTPL	NA
N2	100 Mbps	GTPL	NA
N3	150 Mbps bandwidth	GTPL	NA
O. OTC for leased circuits bandwidth			
O1	2 Mbps	GTPL	NA
O2	8 Mbps	GTPL	NA
O3	16 Mbps	GTPL	NA
O4	20 Mbps	GTPL	NA
O5	30 Mbps	GTPL	NA
O6	40 Mbps	GTPL	NA
O7	50 Mbps	GTPL	NA
O8	100 Mbps	GTPL	NA
O9	150 Mbps	GTPL	NA
Q Software and licenses			
Q1	Adaptive Traffic Control System (ATCS) including traffic enforcement system-RLVD, SVD, ANPR(software+license)	ATCS - Efftronics and TES – Lookman (Secura)/Metafusion	ATCSAAA
Q2	Intelligent Transit Management System (ITMS) (software+license)	Amnex	Locomate
Q3	Solid Waste Management (software+license)	Amnex	Ecoskipper
Q4	Smart Poles (software+license)	Amnex	IION
Q6	Variable Messaging Signage (software+license)	SLS	ENERGASIA-ESENSE
Q7	Emergency call box (ECB) (software+license)	Zenitel	TCiS-5
Q8	Public Address System (software+license)	Zenitel	Alphacom XE1, ENA-2100, VLS-15TF
Q9	ICCC City Operations System Application (software+license)	Amnex	ICCC Outline
Q10	Contact center application and database (software+license)	Coral	Coral IRIS IVDX

Sn.	Line Item	Brand	Model Details
Q11	Enterprise Management System (including SLA Mgmt, Helpdesk Mgmt, Network Mgmt, BMS) (Please give the break up if different software's required)	Motadata	MOTADATA
Q12	Anti-virus (software+license)	Seqrite	FG1500D
	I. Data Center on cloud	Amazon / GCP	Amazon web service / GCP

Selected Bidder will be responsible to ensure that in case any of the above mentioned make and model are changed, then concerned commercials with the new OEM/Vendor needs to be worked out by the Selected Bidder at no cost to GSCDL.

40. Annexure 26 Standard and Guidelines

Metadata and Data Standards

Standardization of data elements is the prerequisite for systematic development of e-Governance applications.

Data Standards may be defined as the agreed upon terms for defining and sharing data. Data Standards promote the consistent recording of information and are fundamental to the efficient exchange of information. They provide the rules for structuring information, so that the data entered into a system can be reliably read, sorted, indexed, retrieved, communicated between systems, and shared. They help protect the long-term value of data.

Once the data standards are in place, there is a need to manage data, information, and knowledge. Metadata of standardized data elements can be used for this purpose.

Metadata is structured information that describes, explains, locates or otherwise makes it easier to retrieve, use or manage an information resource. Metadata is often called data about data or information about information. A metadata is a matter of context or perspective -what is metadata to one person or application can be data to another person or application.

In other words, Metadata facilitates the user by providing access to the raw data through which the user can have an understanding of the actual data. Hence, Metadata is an abstraction layer that masks the underlying technologies, making the data access friendlier to the user. Data and Metadata Standards provide a way for information resources in electronic form to communicate their existence and their nature to other electronic applications (e.g. via HTML or XML) or search tools and to permit exchange of information between applications.

The present document "Data and Metadata Standards- Demographic" focuses on Person Identification and Land Region codifications. It includes the following:

- Mechanism for allocation of reference no. to the identified Generic data elements, and their grouping.
- Generic data elements specifications like:
  - Generic data elements, common across all Domain applications - Generic data elements for Person identification
  - Generic data elements for Land Region Codification
  - Data elements to describe Address of a Premises, where a Person resides
- Specifications of Code Directories like:
  - Ownership with rights to update
  - Identification of attributes of the Code directories
  - Standardization of values in the Code directories
- Metadata of Generic Data Elements - Identification of Metadata Qualifiers - Metadata of the data elements
- Illustration of data elements to describe: Person identification and Address of a premises

This Standard would be applicable to all e-Governance applications in India as per the Government's Policy on Open Standards (refer http://egovstandards.gov.in/policy/policy-onopen-standards-for-e-governance/)
Reference Standards:

- ISO Standard 1000:1992 for SI Units
- MNIC Coding for Person Identification
- ISO 693-3 for International language codes
- RGI's coding schemes for Languages
- Top level document provided by Working Group on Metadata and Data Standards
- EGIF (e- Government Interoperability Framework) Standard of U.K.
- uidai.gov.in/UID_PDF/Working Papers/A_UID_Numbering_Scheme.pdf
- http:// www.dolr.nic.in for conversion table of units as used by Department of Land Records
- GoI Policy on open standards version 1.0 released in November, 2010
- UID DDSVP Committee report, Version 1.0, Dec 09, 2009
- ANSI92 Standard

41. Policy on Open Application Programming Interfaces (APIs)

Under the overarching vision of Digital India, Government of India (GoI) aims to make all Government services digitally accessible to citizens through multiple channels, such as web, mobile and common service delivery outlets.

To meet this objective, there is a need for an interoperable ecosystem of data, applications and processes which will make the right information available to the right user at the right time.

Interoperability among various e-Governance systems is an important prerequisite for upgrading the quality and effectiveness of service delivery. For promoting Open Standards for software interoperability across various Government departments and agencies, GoI has already notified the "Policy on Open Standards for e-Governance" and "Technical Standards on Interoperability Framework for e-Governance".

Open API is the API that has been exposed to enable other systems to interact with that system. Open API may be either integrated with the host application or may be an additional piece of software that exposes any proprietary API with an Open API equivalent. The Open API, wheneverpossible, may be free of charge and without restrictions for reuse & modifications.

Policy on Open APIs for Government of India" (hereinafter referred to as the "Policy") will encourage the formal use of Open APIs in Government organizations. This policy sets out the Government's approach on the use of "Open APIs" to promote software interoperability for all e- Governance applications & systems and provide access to data & services for promoting participation of all stakeholders including citizens.

The objectives of this policy are to:

i. Ensure that APIs are published by all Government organisations for all e-Governance applications and systems.

ii. Enable quick and transparent integration with other e-Governance applications and systems.

iii. Enable safe and reliable sharing of information and data across various e-Governance applications and systems.

iv. Promote and expedite innovation through the availability of data from e-Governance applications and systems to the public.

v. Provide guidance to Government organizations in developing, publishing and implementation using these Open APIs.

Government of India shall adopt Open APIs to enable quick and transparent integration with other e-Governance applications and systems implemented by various Government organizations, thereby providing access to data & services and promoting citizen participation forthe benefit of the community.

The Open APIs shall have the following characteristics for publishing andconsumption:

i. The relevant information being provided by all Government organizations through their respective e-Governance applications shall be open and machine readable.

ii. All the relevant information and data of a Government organization shall be made available by Open APIs, as per the classification given in the National Data Sharing and Accessibility Policy (NDSAP-2012), so that the public can access information and data.

iii. All Open APIs built and data provided, shall adhere to National Cyber Security Policy.

iv. The Government organizations shall make sure that the Open APIs are stable and scalable.

v. All the relevant information, data and functionalities within an e-Governance applicationor system of a Government organisation shall be made available to other e-Governance applications and systems through Open APIs which should be platform and language independent.

vi. A Government organisation consuming the data and information from other e- Governance applications and systems using Open APIs shall undertake information handling, authentication and authorisation through a process as defined by the API publishing Organisation.

vii. Each published API of a Government organization shall be provided free of charge whenever possible to other Government organizations and public.

viii. Each published API shall be properly documented with sample code and sufficient information for developers to make use of the API.

ix. The life-cycle of the Open API shall be made available by the API publishing Government organisation. The API shall be backward compatible with at least two earlier versions.

x. All Open API systems built and data provided shall adhere to GoI security policies and guidelines.

xi. Government organizations may use an authentication mechanism to enable service interoperability and single sign-on.

The policy shall be applicable to all Government organisations under the Central Government and those State Governments that choose to adopt this policy for the following categories of e-Governance systems:

- All new e-Governance applications and systems being considered for implementation.
- New versions of the legacy and existing systems.

Internet of Things

1. Sensors and Actuators

a) IEEE 1451

i. IEEE 1451 is a set of smart transducer interface standards developed by the Institute of Electricaland Electronics Engineers (IEEE) Instrumentation and Measurement Society's Sensor Technology Technical Committee describing a set of open, common, network-independent communication interfaces for connecting transducers (sensors or actuators) to microprocessors, instrumentation systems, and control/field networks.

b) Identification Technology

ISO/IEC JTC 1/SC31 Automatic identification and data capture techniques It develops and facilitates standards within the field of automatic identification technologies. These technologies include 1D and 2D barcodes, active and passive RFID for item identification and OCR.

c) **ISO/IEC JTC 1/SC31 Automatic identification and data capture techniques**
It develops and facilitates standards within the field of automatic identification technologies. These technologies include 1D and 2D barcodes, active and passive RFID for item identification and OCR.

d) Domain Specific Compliance
Sensors/IoT Devices/Actuators should follow the compliance to respective domain specific standards, like healthcare devices HL7, automobile/bus UBS¬II (ITS sensor parameter & standards), OBD-II, Electric Vehicle Charging etc

2. Communication Technology

a) Thread
Networking protocol called Thread that aims to create a standard for communication between connected household devices.

b) AllJoyn
Open source AllJoyn protocol was initially developed by Qualcomm provides tools for the entireprocess of connecting and maintaining devices on a Wi-Fi network.

c) IEEE 802.15.4
It offers physical and media access control layers for low-cost, low-speed, low-power WirelessPersonal Area Networks (WPANs).
IEEE 802.15.4e-2012, IEEE 802.15.4-2011, IEEE 802.15.4-2003, IEEE 802.15.4-2006

I**ETF IPv6 over Low power WPAN (6LoWPAN)**

It defines encapsulation and header compression mechanisms that allow IPv6 packets to be sent to and received over IEEE 802.15.4 based networks. 6LoWPAN Frame Format

Fragmentation and Reassembly

Header Compression

Support for security mechanisms

IETF "Routing Over Low power and Lossy (ROLL)

Protocol for Low power and Lossy Networks (LLNs) (RPL), RPL Topology Formation(Destination Oriented Directed Acyclic Graphs DODAGs), RPL Control Messages

IETF Constrained Application Protocol (CoAP)
It offers simplicity and low overhead to enable the interaction and management of embedded devices.

3. **Use Case / Application Specific**

a) Industrial IoT (IIoT)
Object Modeling Group (OMG) has been active in IIoT standardization efforts. OMG IoT standards and activities include (but are not limited to):

- Data Distribution Service (DDS)
- Dependability Assurance Framework For Safety-Sensitive Consumer Devices
- Threat Modeling
- Structured Assurance Case Metamodel

- Unified Component Model for Distributed, Real-Time and Embedded Systems
- Automated Quality Characteristic Measures
- Interaction Flow Modeling LanguageTM (IFMLTM)

(Source: http://www.omg.org/hot-topics/iot-standards.htm)

4. Consortia

a) Open Interconnect Consortium

OIC (Atmel, Dell, Broadcom, Samsung, and Wind River as members) is an open environmentto support the billions of connected devices coming online

b) Industrial Internet Consortium

It was founded by Intel, Cisco, AT&T, GE & IBM with the goal of developing standards specifically for industrial use of the Internet of Things.

5. Architecture Technology

IEEE P2413: Standard for an Architectural Framework for the Internet of Things The architectural framework for IoT provides a reference model that defines relationships among various IoT verticals (e.g., transportation, healthcare, etc.) and common architecture elements. The standard also provides a reference architecture that builds upon the reference model. The reference architecture covers the definition of basic architectural building blocks and their ability to be integrated into multi-tiered systems.

6. Further Reading for Standards

a) ITU Standardization Roadmap

This document was released on 6 May 2016. It contains a collection of Standards/ITU-T Recommendations that fit into the scope of Joint Coordination Activity for IoT and Smart Cities. It includes Standards/ITU-T Recommendations related to Internet of Things (IoT), smart cities and communities (SC&C), network aspects of identification systems, including RFID (NID) and ubiquitous sensor networks (USN). Refer References for the link

b) IERC Position Paper on IoT Standardization

It presents an inventory of existing standards and provides an overview of past and current activity in relation to standardization in the area of Internet of Things, and assembles a series of examples of standardization activities in this area

42. Functional and Technical Specifications

42.1 Functional Requirement - Adaptive Traffic Control System

#	Building Blocks
1	Traffic Signal Controller
2	Vehicle Detectors
3	Communication Network
4	Software Application

42.1.1 Functional Requirement – Traffic Signal Controller

#	Description
1	**Make – Provided in RFP**
2	**Model – Provided in RFP**
3	The Traffic Signal Controller equipment is a 32 bit or 64 bit microcontroller with solid state traffic signal lamp switching module with the ability to program any combination of traffic signal stages, phases and junction groups. The controller will ideally have a conflict monitoring facility to ensure that conflicting, dangerous are pre-flagged at the programming stage and these are disallowed even during manual override phase.
4	The Traffic Signal Controller will be adaptive so that it can be controlled through the central traffic control center as an individual junction or as part of group of traffic junctions along a corridor or a region. The signal controller design must be flexible for the junction could be easily configured to be part of any corridor or group definition and could be changed through central command controller easily
5	Site specific configuration data shall be stored in a non-volatile memory device (FLASH memory) easily programmable at the site through keypad or laptop. A minimum of 512KB flash memory and 128KB RAM shall be provided. Volatile memory shall not be used for storing the junction specific plans or signal timings.
6	All timings generated within a traffic signal controller shall be digitally derived from a crystal clock which shall be accurate to plus or minus 100 milliseconds.
7	The controller shall provide a real time clock (RTC) with battery backup that set and update the time, date and day of the week from the GPS. The RTC shall have minimum of 10 years battery backup with maximum time tolerance of +/- 2 sec per day.
8	The controller shall have the facility to update the RTC time from ATCS server, GPS and through manual entry.
9	The traffic signal system including controller shall have provision for audio output tones and should be disabled friendly.
10	The controller shall be capable of communicating with the ATCS server through Ethernet on a managed leased line network or any other appropriate stable communication network.

42.1.2 Police Panel

#	Description
1	Four Hurry Call switches: The Hurry Call mode will provide the means to force the controller to a defined stage, without violating safety clearances. A preemption input may be used to demand the Hurry Call mode to give right of way to emergency vehicles. It should be possible to configure the Hurry Call switches to any stage as per site requirements.
2	One Forced Flash Switch: Activation of this switch should force the signal to Flashing Amber / Flashing Red.
3	One Auto / Manual Switch: Activation of this switch should enable manual operation of the controller. Deactivation of the manual switch shall continue from the current stage without interruption.
4	One Manual Advance Pushbutton Switch: In manual operation mode, the stages appear in the sequence specified in the signal plan timetable. Activating the pushbutton switch shall terminate the currently running stage and start the next, without violating safety clearances.
5	One Junction OFF Switch: Activating this switch should put OFF all signal lamps. On deactivation of the switch the traffic signal controller shall resume its normal operation without violating any safety clearances.

42.1.3 Modes of Operation

The traffic signal controller shall have the following modes of operation:

#	Description
1	Fixed Time: In fixed time (pre-timed) mode the traffic signal controller shall execute stage timings according to the site specific timetable maintained in the traffic signal controller FLASH memory. Inputs from vehicle detectors shall be ignored in this mode and no preemption shall be made on any stage. Cycle time remains constant in every cycle execution for a given time period.
2	Vehicle Actuation with All Stages Preemption: In the vehicle actuation with all stages preemption mode, the traffic signal controller shall execute stage timings as per demand from vehicle detectors within the constraints of Minimum Green, Maximum Green running period for the stage and Cycle time stored in the traffic signal controller FLASH memory. Preemption shall be possible for all demand actuated stages. Cycle time may vary in every cycle execution.
3	Semi-Actuation: In the semi-actuation mode, the traffic signal controller shall execute stage timings in the vehicle actuated stages as per demand from vehicle detectors within the constraints of Minimum Green, Maximum Green running period for the stage and Cycle time stored in the traffic signal controller FLASH memory. All other stages shall execute the Maximum green time configured for the stage. Preemption shall be possible for all demand actuated stages. Cycle time may vary in every cycle execution.
4	Stage Skipping: The traffic signal controller shall not execute the stage enabled for skipping when there is no vehicle demand registered for the stage till clearance amber time of the previous stage.
5	Transit Signal Priority (TSP) for BRT buses: The traffic signal controller shall provide transit signal priority for buses in dedicated lane to ensure minimum stop delay at the intersection, without violating safety clearances.

#	Description
6	Vehicle Actuation with Fixed Cycle length: In vehicle actuation with fixed cycle length mode, the traffic signal controller shall execute stage timings as per demand from vehicle detectors within the constraints of Minimum Green, Maximum Green running period for the stage and Cycle time shall be maintained constant during a given timeslot. Preemption for all demand actuated stages except for Priority Stage shall be possible.
7	Full ATCS (FATCS): In FATCS mode, the traffic signal controller shall execute stage timings as per demand within the constraints of Minimum Green, Maximum Green running period for the stage and Cycle time specified by the Central Computer during every cycle switching. Preemption for all demand actuated stages except Priority Stage shall be possible in this mode. The traffic signal controller shall identify a communication failure with the central computer within a specified time period. In such an event the signal plan timings shall be executed from the local timetable stored in the traffic signal controller FLASH memory. Fallback mode of the traffic signal controller shall be vehicle actuated. On restoration of the communication with central computer the traffic signal controller shall automatically resort to FATCS mode. The traffic signal controller shall accept commands for remote selection / de-selection of the following from the Central Computer at Interim ICCC/ICCC. Hurry Call Flashing Amber / Flashing Red Junction Off If not reverted to the normal operation within the time period listed below, the traffic signal controllers shall timeout the commands and operate normally Hurry Call – 5 Minutes Flashing Amber / Flashing Red – 30 Minutes Junction Off – 30 Minutes The traffic signal controller shall report the following to the Central Computer through the communication network every cycle or on an event as appropriate. Green time actually exercised for each approach (stage preemption timing) against the Green running period set for the approach by the Central Computer Mode of Operation Lamp failure, if any Output short circuit, if any Detector failure, if any

42.1.4 Traffic Signal Controller Operating Parameters

Phases - The controller shall have facility to configure 32 Phases either for vehicular movement, filter green, indicative green, pedestrian movement or a combination thereof.

#	Description
1	It shall be possible to operate the filter green (turning right signal) along with a vehicular phase. The filter green signal shall flash for a time period equal to the clearance amber period at timeout when operated with a vehicular phase.
2	The pedestrian phase signal shall be configured for flashing red or flashing green aspect during pedestrian clearance.
3	It shall be possible to configure any phase to the given lamp numbers at the site.
4	Stages – The controller shall have facility to configure 32 Stages
5	Cycle Plans – The controller shall have facility to configure 24 Cycle Plans and the Amber Flashing / Red Flashing plan. It shall be possible to define different stage switching sequences in different cycle plans. The controller shall have the capability for a minimum of 32 cycle-switching per day in fixed mode of operation.

#	Description
6	Day Plans – The controller shall have facility to configure each day of the week with different day plans. It shall also be possible to set any of the day plans to any day of the week. The controller shall have the capability to configure 20 day plans.
7	Special Day Plans – The controller shall have facility to configure a minimum of 20 days as special days in a calendar year.
8	Starting Amber – During power up the controller shall initially execute the Flashing Amber / Flashing Red plan for a time period of 3 Seconds to 10 Seconds. The default value of this Starting Amber is 5 Seconds. Facility shall be available to configure the time period of Starting Amber within the given limits at the site.
9	Inter-green – Normally the inter-green period formed by the clearance Amber and Red extension period will be common for all stages. However, the controller shall have a facility to program individual inter-green period from 3 Seconds to 10 Seconds.
10	Minimum Green – The controller shall allow programming the Minimum Green period from 5 Seconds to 10 Seconds without violating the safety clearances. It should not be possible to preempt the Minimum Green once the stage start commencing execution.
11	All Red – Immediately after the Starting Amber all the approaches should be given red signal for a few seconds before allowing any right of way, as a safety measure. The controller shall have programmability of 3 Seconds to 10 Seconds for All Red signal.
12	Signal lamps monitoring – The controller shall have inbuilt circuitry to monitor the lamp status
13	Green – Green Conflict Monitoring – The controller shall have a facility to list all conflicting phases at an intersection. The controller should not allow programming of these conflicting phases in a Stage. A hardware failure leading to a conflict condition (due to faulty devices or short circuit in the output) shall force the signal into Flashing Amber / Flashing Red.
14	Cable less Synchronization – It shall be possible to synchronize the traffic signal controllers installed in a corridor in the following modes of operation, without physically linking them and without communication network. GPS enabled RTC shall be the reference for the cable less synchronization.
15	Fixed Time mode with fixed offsets
16	Vehicle Actuated mode with fixed offsets

42.1.5 Input and Output facilities

#	Description
1	Lamp Switching: The controller shall have maximum 64 individual output for signal lamp switching, configurable from 16 to 32 lamps. The signal lamps shall be operating on appropriate DC/AC voltage of applicable rating
2	Detector Interface: A minimum of 16 vehicle detector inputs shall be available in the controller. All detector inputs shall be optically isolated and provided with LED indication for detection of vehicle.
3	Communication Interface: The traffic signal controller shall support Ethernet interface to communicate with the ATCS server
4	Power Saving: The traffic signal controller shall have a facility to regulate the intensity of signal lamps during different ambient light conditions thereby saving energy.
5	Real-time Clock (RTC): The GPS receiver for updating time, date and day of the week information of the traffic signal controller should be an integral part of the traffic signal controller.

#	Description
6	The traffic signal controller shall update the date, time and day of the week automatically from GPS during power ON and at scheduled intervals.
7	Manual entry for date, time and day of week shall be provisioned for setting the traffic signal controller RTC (Real Time Clock).
8	It shall be possible to set the RTC from the Central Server when networked
9	Keypad (optional): The traffic signal controller shall have a custom made keypad or should have provision for plan upload and download using PC/laptop/Central Server
10	Operator Display (optional): The traffic signal controller shall optionally have a LED backlit Liquid Crystal Display (LCD) as the operator interface.

42.1.6 Functional Requirement - Camera based Vehicle Detector

The detector equipment is a separate logic unit, which may be integrated into the controller, or alternatively mounted in its own housing. The outputs of the detectors indicate the presence of vehicles and are used to influence the operation of the traffic signal controller and shall generate counts, demands and extensions for right-of-way. Means shall be provided so that a detector may be connected to demand and / or extend a phase movement as specified.

#	Description
1	**Make** Provided in RFP
2	**Model** Provided in RFP
3	The contractor shall clearly specify the placement of the detector (upstream, downstream, stop-line, exit etc.) for independent straight and right turn signals.
4	The detector shall be able to count vehicles in non-lane based mixed traffic flow conditions. The accuracy of counts shall be bigger than 90% over all light and weather conditions. The contractor shall clearly specify how this is accomplished.
5	The contractor shall give an estimate of the total number of vehicle presence detection zones and vehicle detectors required and the type of detection system recommended.
6	A detector that does not change its status at least once during a stage execution shall be notified to the Central Computer (in ATCS mode) at the termination of the associated stage.

42.1.7 Functional Requirement -Countdown Timer

Countdown Timer installed at each traffic junction under ATCS System Project.

#	Description
1	**Make: Provided in RFP**
2	**Model: Provided in RFP**
3	Count Down Timer to be configured in Vehicular Mode.
4	The Vehicular countdown timer should be dual color, · Red for Stop or STP · Green color for Go
5	There should be alternate Red and Balance phase time for STOP or STP in Flashing
6	Alternate Green and Balance Phase Time for Go in Flashing

42.1.8 Functional Requirement -Communication Network

#	Description
1	Function of the Communication network is for remote monitoring of the intersection and its management. Real time data (like RTC time, stage timing, mode, events, etc.) from the traffic signal controller is required to be sent to the Central Computer in Interim ICCC/ICCC. Central Computer running the ATCS application shall calculate and send optimum signal timings to all intersections in the corridor. The contractor shall clearly specify the bandwidth requirements and the type of network recommended for the ATCS.

42.1.9 Functional Requirement -ATCS Software Application

#	Description
	Objective of the ATCS is to minimize the stops and delays in a road network to decrease the travel time with the help of state-of-the-art technology. The adaptive traffic control system shall operate in real time with the capacity to calculate the optimal cycle times, effective green time ratios, and change intervals for all system traffic signal controllers connected to it. These calculations will be based up on assessments carried out by the ATCS application software running on a Central Computer based on the data and information gathered by vehicle detectors at strategic locations at the intersections controlled by the system.

The ATCS application software shall do the following:

#	Description
1.	**Make Provided in RFP**
2.	**Model Provided in RFP**
3.	Identify the critical junction of a corridor or a region based on maximum traffic demand and saturation.
4.	The critical junction cycle time shall be used as the group cycle time i.e. cycle time common to all intersection in that corridor or region.
5.	Stage optimization to the best level of service shall be carried out based on the traffic demand.
6.	Cycle optimization shall be carried out by increasing or decreasing the common corridor cycle time based on the traffic demand within the constraints of Minimum and Maximum designed value of cycle time.
7.	Offset correction shall be carried out to minimize number of stops and delays along the corridor for the priority route. Offset deviation measured using distance and speed between successive intersections shall be corrected within 5 cycles at a tolerance of +/- 5 seconds maximum.
8.	The system shall have provision to configure priority for upstream signals as default. The ATCS software shall continuously check the traffic demand for upstream and downstream traffic and automatically assign the priority route to the higher demand direction.
9.	Develop appropriate stage timing plans for each approach of every intersection under the ATCS, based on real time demand
10.	Propose timing plans to every intersection under the ATCS in every Cycle
11.	Verify the effectiveness of the proposed timing plans in every cycle
12.	Identify Priority routes
13.	Synchronize traffic in the Priority routes
14.	Manage and maintain communication with traffic signal controllers under ATCS
15.	Maintain database for time plan execution and system performance
16.	Maintain error logs and system logs

#	Description
17.	Generate Reports on request
18.	Graphically present signal plan execution and traffic flow at the intersection on desktop
19.	Graphically present time-space diagram for selected corridors on desktop
20.	Graphically present network status on desktop
21.	Make available the network status and report viewing on Web
22.	The ATCS shall generate standard and custom reports for planning and analysis
23.	It shall be possible to interface the ATCS with a popular microscopic traffic flow simulation software for pre and post implementation analysis and study of the proposed ATCS control strategy
24.	Shall have the ability to predict, forecast and smartly manage the traffic pattern across the signals over the next few minutes, hours or 3- 5 days and just in the current real time.
25.	Shall provide a decision support tool for assessing strategies to minimize congestion, delays and emergency response time to events via simulation and planning tools liked with real time traffic data fusion and control of traffic signaling infrastructure on ground.
26.	Shall collect continuously information about current observed traffic conditions from a variety of data sources and of different kind (traffic states, signal states, vehicle trajectories, incidents, road works, …)
27.	Shall infer a coherent and comprehensive observed traffic state (speeds, vehicular densities, and presence of queues) on all network elements, from abovementioned observations, including vehicle trajectories, through a number of map matching, data validation, harmonization and fusion processes
28.	Shall extend the measurements made on only a number of elements both on the rest of the unmonitored network, and over time, thus obtaining an estimation of the traffic state of the complete network and the evolution of this traffic state in the future
29.	Shall forecast the traffic state with respect to current incidents and traffic management strategies (e.g. traffic signal control or variable message signs), improving the decision making capabilities of the operators even before problems occur
30.	Shall calculate customisable Key Performance Indicators (KPI) to quickly assess the results
31.	Shall provide calculated traffic flows estimation and forecast, queues and delays to Urban Control and Adaptive Signal Control Systems, allowing for proactive Traffic Management and Control
32.	Shall generate alerts to the operator that trigger on customizable conditions in the network (starting with simple drops in flow, up to total queue lengths along emission sensitive roads surpassing a definable threshold)
33.	Shall distribute both collected and calculated traffic information via a variety of communication protocols and channels, ensuring high interoperability degree and thus acting as a “traffic data and information hub”
34.	Shall create a traffic data warehouse for all historic traffic information gathered from the hardware installed on the road network.
35.	Shall operate in real time that is continuously updating the estimates on the state of the network and the travel times on the basis of data collected continuously over time.
36.	Shall operate the traffic lights with the adaptive traffic controls, based on the current and forecasted traffic demand and the current incidents, thus optimizing the green waves continuously throughout the network
37.	Enable a smart public transport priority respecting the delays for all road users at once with the adaptive signal controller

42.1.10 Reports

#	Description
	Make : Provided in RFP
	Model : Provided in RFP
1.	Intersection based reports
2.	Stage Timing report – The report shall give details of time at which every stage change has taken place. The report shall show the stage sequence, stage timings and stage saturation of all stages of all cycles for a day. The saturation is defined as the ratio between the available stage timings to the actual stage timing executed by the traffic signal controller for the stage (stage preemption time).
3.	Cycle Timing report – The report shall give details of time at which every cycle has taken place. The report shall show the cycle sequence and cycle timings for all the cycles in a day.
4.	Stage switching report – The report shall give details of time at which a stage switching has taken place. The report shall show the stage sequence, stage timings and stage saturation for a day.
5.	Cycle Time switching report – The report shall give details of time at which a cycle switching has taken place. The report shall show the cycle sequence and cycle timings for the cycle in a day.
6.	Mode switching report – The report shall give details of the mode switching taken place on a day.
7.	Event Report - The report shall show events generated by the controller with date and time of event.
8.	Power on & down: The report shall show time when the master is switched on, and last working time of the master controller.
9.	Intensity Change – The report shall show the brightness of the signal lamp is changed according to the light intensity either manually through keypad or automatically by LDR with time stamp.
10.	Plan Change – The report shall show the time of change of plan either through keypad or remotely through a PC or Server.
11.	RTC Failure – The report shall show the time when RTC battery level goes below the threshold value.
12.	Time Update – The report shall show the time when the Master controller updated its time either manually through keypad, automatically by GPS or through remote server.
13.	Mode Change – The report shall show the time when Master controller's operating mode is changed either manually through keypad or a remote server. The typical modes are FIXED, FULL VA SPLIT, FULL VA CYCLE, FLASH, LAMP OFF and HURRY CALL.
14.	Lamp Status Report – The report shall show lamp failure report with date and time of
	failure, colour of the lamp and associated phase
15.	Loop Failure Report – The report shall show the date and time of detector failure with detector number and associated phase.
16.	Conflict – The report shall show the conflict between lamps (RED, AMBER, GREEN) in the same phase or conflict between lamps with other phase.
17.	Corridor Performance Report – The report shall show the saturation of all the intersections in a corridor for every cycle executed for the corridor and the average corridor saturation for a day
18.	Corridor Cycle Time Report – The report shall show the Corridor cycle time, Intersection cycle time, Mode of operation and degree of saturation of all the intersections in a corridor for every cycle for a day

42.1.11 Graphical User Interface

#	Description
1.	User login – Operator authentication shall be verified at this screen with login name and password
2.	Network Status Display – This online display shall indicate with appropriate colour coding on site map whether an intersection under the ATCS is online or off. On double clicking the intersection a link shall be activated for the traffic flow display for the intersection.
3.	Traffic Flow Display – This online display shall indicate the current traffic flow with animated arrows, mode of operation, stage number being executed and elapsed stage time.
4.	Saturation Snapshot – This display shall show the current saturation levels of all intersections in a corridor.
5.	Reports Printing / Viewing – This link shall allow selection, viewing and printing of different reports available under ATCS
6.	Time-Space Diagram – The time-space diagram shall display the current stages being executed at every intersection in a corridor with immediate previous history.
7.	Junctions shall be plotted proportional to their distance on Y-axis and time elapsed for the stage in seconds on X-axis.
8.	Junction names shall be identified with each plot.
9.	Facility shall be available to plot the time- space diagram from history.
10.	Currently running stage and completed stages shall be identified with different colours.
11.	Stages identified for synchronization shall be shown in a different colour.
12.	Speed lines shall be plotter for stages identified for synchronization to the nearest intersection in both directions.
13.	It should be possible to freeze and resume online plotting of Time-Space diagram.
14.	The system shall have other graphical interfaces for configuring the ATCS, as appropriate.

42.2 Technical Specifications - Adaptive Traffic Control System

42.2.1 Adaptive Traffic Control- Traffic Sensor

Sr. No	Description
1	Appropriate camera based traffic sensors may be chosen to provide the operational levels and accuracy as required for successful function of the ATCS system as per the SLAs defined.

42.2.2 Adaptive Traffic Control- Traffic Controller

Sr. No	Description
1	Appropriate controller technology may be chosen to provide the operational levels and accuracy as required for successful function of the ATCS system as per the SLAs defined. The proposed traffic controller shall be disabled friendly and shall also provide audio tones output.

42.2.3 Adaptive Traffic Control- Traffic Light Aspects

Sr. No	Description
1.	**Make** Efftronics
2.	**Model**
	Supply of RED, LED based Road Signal Lamp TLCRL3H01
	Supply of Amber, LED based Road Signal Lamp TLCAL3H01
	Supply of Green, LED based Road Signal Lamp TLCGL3H01
3.	**Key Features:**
a.	lowest power consumption for all colors, maximum 8 watts for each color
b.	Meets or exceeds intensity, colour and uniformity specifications
c.	Temperature compensated power supplies for longer LED life
d.	Uniform appearance light diffusing
e.	Should be Intertek/ETL/EN compliant
f.	All units operate at voltage of - 12 / 24 volts DC
g.	LED shall be single source narrow beam type with clear lens & Luminance uniformity of 1:15
h.	Pedestrian traffic lights should be provided with clearly audible signals for the benefit of pedestrians with visual impairments
i.	Phantom Class 5 or equivalent. IP Rating: IP65
4.	**LED aspects:**
a.	Red, Amber, Green-Full (300 mm diameter) : Hi Flux
b.	Green-arrow (300 mm diameter): Hi flux
c.	Animated Pedestrian-Red and Green Animated c/w countdown (300 mm) Hi Brite with diffusions
5.	**LED Retrofit Specifications:**
a.	Power supply:230 Vac +/- 10% and frequency 50+/-5Hz
b.	Standards: EN 12368 compliant
c.	Convex Tinted Lens: Available
d.	Fuse and Transients: Available
e.	Operating Temperature Range: 0 degree Celsius to 55 degree CelciusTurn Off/Turn On Time: 75 milli seconds max
f.	Total Harmonic Distortion: <20%
g.	Electromagnetic interference: Meets FCC Title 47,Subpart B, Section 15 Regulation or equivalent EN/IRC standard
h.	Blowing Rain/Dust Spec: MIL 810F or Equivalent EN/IRC standard complaint
i.	Minimum Luminous Intensity (measured at intensity point)(cd): Red 400
j.	Amber 400
k.	Green 400
l.	Dominant Wavelength (nm): Red 630 Amber 590
m.	Green 490
n.	Lamp conflict compatibility system: Compatible with lamp failure and conflict detection

42.2.4 Countdown Timer

#	Parameters	Description
1.	**Make**	Efftronics
2.	**Model**	TLCS03ZH01
3.	**CPU**	**Micro Controller**

#	Parameters	Description
4.	**Mechanical Specifications**	
A	Structural Material	Polycarbonate strengthened against UV rays
B	Body Color	Light Grey/Black
C	Dimensions	360mm x 370mm x 220mm
5.	**Display Specification**	
A	Lamp Diameter	300mm
B	Digit Height	150 -165mm
C	Display Type	Dual Coloured (Red & Green)
D	No. of Digit	3
6.	**LED Specifications**	
A	LED Diameter	5mm LED
B	Viewing Angle	30°
C	LED Wave Length	630-640nm (Red), 505nm - 520nm (Blue-Green)
D	LED Dice Material	AIInGap (Red), InGaN (Blue-Green)
E	LED Warranty period	5 years
7.	**Technical Features**	
A	Power Consumption	20 - 30 Watt Per Lamp
B	Input Power	85-260V AC, 50Hz
C	Operating Temperature	-20 to + 60 °C
D	Humidity	0% to 95% Relative Humidity
E	Water & Dust Ingress	IP 65
F	Standard	En12966 Compliant

42.2.5 Poles for Traffic Signals

Sr. No	Component	
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	Material	
4	Paint	Pole painted with two coats of zinc chromate primer and two coats of golden yellow Asian apostolate paint or otherwise as required by architect and in addition bituminous painting for the bottom 1.5 m portion of pole.

42.2.6 Cables for Traffic Signals

Sr. No	Component	Description
1	**Make**	Provided in RFP

Sr. No	Component	Description
2	**Model**	Provided in RFP
3	No's of core	7 and 14 core 1.5 sq. mm. 3
		Core 2.5 sq. mm.
4	Materials	PVC insulated and PVC sheathed armored cable with copper conductor of suitable size as specified in BOQ.
5	Certification	ISI Marked
6	Standards	Indian Electricity Act and Rules
A.	IS:1554	PVC insulated electric cables (heavy duty)

42.3 Functional Requirements of the Red Light Violation Detection System

#	Description	
1	**Make Provided in RFP**	
2	**Model Provided in RFP**	
3	**General**	
a.	The following Traffic violations to be automatically detected by the system by using appropriate Non- Intrusive sensors technology: The system should have both provisions to detect red light status by taking the signal feed from the traffic signal controller as well as by video analytics method using another camera (Evidence Camera) focused at the red light. The Evidence camera should also be used for evidence snap generation.	
	a) Red Light Violation	
	b) Stop Line Violation	
b.	The system should be capable of capturing multiple infracting vehicles simultaneously in Different lanes on each arm at any point of time with relevant infraction data like:	
	a) Type of Violation	
	b) Date, time, Site Name and Location of the Infraction	
	c) Registration Number of the vehicle through ANPR	
	Camera system for each vehicle identified for infraction.	

#	Description	
	The system should be equipped with a camera system to record a digitized image and video of the violation, covering the violating vehicle with its surrounding and current state of signal (Red/Green/Amber) by which the system should clearly show nature of violation and proof thereof :-	
	a) When it violates the stop line.	
	b) When it violates the red signal.	
c.	c) Besides, a closer view indicating readable registration number plate patch of the violating vehicle for court evidence for each violation.	
	The system must have in-built tool to facilitate the user to compose detail evidence by stitching video clips from any IP camera in the junction (including but not limited to the red light violation detection camera, evidence camera), and any other surveillance cameras in the vicinity of the spot of incidence. The entire evidence should be watermarked and encrypted to stand the court of	
	law.	
d.	The system shall be able to detect all vehicles infracting simultaneously in each lane/ arm at the junction as per locations provided. It should also be able to detect the vehicles infracting serially one after another in the same lane. The vehicles should be clearly identifiable and demarcated in the image	
	produced by the camera system.	
e.	The Evidence image produced by the system should be wide enough to give the exact position of the infracting vehicles with respect to the stop line and clearly indicate colour of the Traffic light at the instant of Infraction even if any other means is being	
	used to report the colour of the light.	
f.	The system should interface with the traffic controller to validate the colour of the traffic signal reported at the time of Infraction so as to give	
	correct inputs of the signal cycle.	
g.	The Evidence and ANPR camera should continuously record all footage in its field of view to be stored at the local base station. This should be extractable onto a portable device as and when required.The option of live viewing of evidence cameras from the locations shall be available at the TMC. The network should have the capability to provide the real time feed of the evidence camera to the TMC at the best resolution possible on the	
	available network.	
h.	The system shall be equipped with IR Illuminator to ensure clear images including illumination of the Number Plate and capture the violation image under	
	low light conditions and night time.	
4	**Recording & display information archive**	
	medium	
a.	The recording and display of information should be	
	detailed on the snapshot of the infracting vehicle as follows:	

#	Description	
b.	Computer generated unique ID of each violation	
c.	Date (DD/MM/YYYY)	
d.	Time (HH:MM:SS)	
e.	Equipment ID	
f.	Location ID	
g.	Carriageway or direction of violating vehicle	
h.	Type of Violation (Signal/Stop Line)	
i.	Lane Number of violating vehicle	
j.	Time into Red/Green/Amber	
k.	Registration Number of violating vehicle	
5	**On site-out station processing unit**	
	communication & Electrical Interface	
a.	The system should automatically reset in the event of a program hang up and restart on a button press. However the system should start automatically after	
	power failure.	
b.	The system should have secure access mechanism	
	for validation of authorised personnel.	
c.	Deletion or addition and transfer of data should only	
	be permitted to authorised users.	
d.	A log of all user activities should be maintained in	
	the system.	
e.	Roles and Rights of users should be defined in the	
	system as per the requirements of the client	
f.	All formats of the stored data with respect to the	
	infractions should be Non Proprietary.	
g.	The communication between the on-site outstation processing unit housed in the junction box and the detection systems mounted on the cantilever shall	
	be through appropriate secured technology.	
h.	The system should have the capability to transfer the data to Interim ICCC/ICCC through proper encryption in real time and batch mode for verification of the infraction and processing of challan. Call forwarding architecture shall be	
	followed to avoid any data loss during transfer.	
i.	In the event that the connectivity to the Interim ICCC/ICCC is not established due to	
	network/connectivity failures, then all data pertaining to the infraction shall be stored on site and will be transferred once the connectivity is re- established automatically. There shall also be a facility of physical transfer of data on portable device whenever required. There should be a provision to store minimum **one week** of data at	
	each site on a 24x7 basis.	
6	**Mounting structure**	

#	Description	
a.	Should be cantilever mounted and shall have minimum 6 Mtrs. height with appropriate vertical clearance under the system from the Road surface	
	to ensure no obstruction to vehicular traffic.	
b.	It should be capable to withstand high wind speeds and for structural safety, the successful bidder has to provide structural safety certificate from qualified structural engineers approved/ certified	
	by Govt. Agency.	
c.	It shall be painted with one coat of primer and two coats of PU paint. The equipment including poles, mountings should have an aesthetic feel keeping in mind the standards road Infrastructure (e.g Poles, Navigation boards etc) currently installed at these locations. The equipment should look "one" with the surroundings of the location and not look out of	
	place.	
d.	Rugged locking mechanism should be provided for	
	the onsite enclosures and cabinets.	
7	**RLVD Application**	
a.	It should be capable of importing violation data for storage in database server which should also be available to the Operator for viewing and retrieving the violation images and data for further processing. The programme should allow for viewing, sorting,	
	transfer & printing of violation data.	
b.	It should generate the photograph of violations captured by the outstation system which include a wider view covering the violating vehicle with its surrounding and a closer view indicating readable registration number plate patch of the violating	
	vehicle or its web link on notices for court evidence.	
c.	All outstation units should be configurable using the	
	software at the Central Location.	
d.	Violation retrieval could be sorted by date, time,	
	location and vehicle registration number and the data structure should be compatible with	
	Gandhinagar Police database structure. It should	
	also be possible to carry out recursive search and wild card search.	
e.	The operator at the back office should be able to get an alarm of all fault(s) occurring at the camera site (e.g. sensor failure, camera failure, failure of linkage with traffic signal, connectivity failure, Camera	
	tampering, sensor tampering).	
f.	The automatic number plate recognition Software will be part of the supplied system, Success rate of ANPR will be taken as 80% or better during the day time and 60% or better during the night time with a	
	standard number plate.	

#	Description	
g.	The application software should be integrated with the E Challan software for tracing the ownership details of the violating vehicle and issuing/printing notices. Any updates of the software (OS, Application Software including any proprietary software), shall be updated free of cost during the	
	contract period by the MSI.	
h.	Image zoom function for number plate and images should be provided. In case the number plate of the infracting vehicle is readable only through the magnifier then in such cases the printing should be	
	possible along with the magnified image.	
i.	Various users should be able to access the system using single sign on and should be role based. Different roles which could be defined (to be finalized at the stage of SRS) could be Administrator,	
	Supervisor, Officer, Operator, etc.	
j.	Apart from role based access, the system should also	
	be able to define access based on location.	
k.	Rights to different modules / Sub-Modules / Functionalities should be role based and proper log report should be maintained by the system for such	
	access.	
l.	Components of the architecture must provide redundancy and ensure that there are no single points of failure in the key project components. Considering the high sensitivity of the system, design shall be in such a way as to be resilient to technological sabotage. To take care of remote failure, the systems need to be configured to mask	
	and recover with minimum outage.	
m.	The architecture must adopt an end-to-end security model that protects data and the infrastructure from malicious attacks, theft etc. Provisions for security of field equipment as well as protection of the software system from hackers and other threats shall be a part of the proposed system. Using Firewalls and Intrusion detection systems such attacks and theft shall be controlled and well supported (and implemented) with the security policy. The virus and worms attacks shall be well defended with Gateway level Anti-virus system, along with workstation level Anti-virus mechanism. There shall also be an endeavor to make use of the SSL/VPN technologies to have secured communication between Applications and its end users. Furthermore, all the system logs shall be properly stored & archived for future analysis and	
	forensics whenever desired.	
n.	The evidence of Infraction should be encrypted and	
	protected so that any tampering can be detected.	
o.	Ease of configuration, ongoing health monitoring, and failure detection are vital to the goals of scalability, availability, and security and must be	
	able to match the growth of the environment.	

#	Description	
p.	System shall use open standards and protocols to the extent possible and declare the proprietary	
	software wherever used.	
q.	The user interface should be user friendly and provide facility to user for viewing, sorting and printing violations. The software should also be capable of generating query based statistical reports	
	on the violation data.	
r.	The data provided for authentication of violations should be in an easy to use format as per the	
	requirements of user.	
s.	User should be provided with means of listing the invalid violations along with the reason(s) of	
	invalidation without deleting the record(s).	
t.	Basic image manipulation tools (zoom etc.) should be provided for the displayed image but the actual	
	recorded image should never change.	
u.	Log of user actions be maintained in read only mode. User should be provided with the password and ID to access the system along with user type (admin,	
	user).	
v.	Image should have a header/footer depicting the information about the site IP and violation details like date, time, equipment ID, location ID, Unique ID of each violation, lane number, Regn. Number of violating vehicle and actual violation of violating vehicle etc. so that the complete lane wise junction behaviour is recorded including (Red Light violation	
	and Stop Line Violation)	
w.	Number plate should be readable automatically by the software/interface. There should be user interface for simultaneous manual authentication /	
	correction and saving as well.	
x.	Interface for taking prints of the violations	
	(including image and above details).	

42.4 Functional Requirements of the Speed Violation Detection System

#	Description
1	**Make Provided in RFP**
2	**Model Provided in RFP**
3	**General**
a.	The Speed Violations should be
	automatically detected by the system by using appropriate sensors technology.
b.	The system should be capable of capturing multiple infracting vehicles simultaneously in defined lanes at any point of time simultaneously with relevant infraction data like:

#	Description
	a) Type of Violation
	b) Speed of violating vehicle
	c) Notified speed limit
	d) Date, time, Site Name and Location of the Infraction
	e) Registration Number of the vehicle through ANPR Camera system
	for each vehicle identified for infraction
c.	The system should be equipped with a camera system to record a digitized image or video frames of the violation, covering
	the violating vehicle with its surrounding
d.	The system shall provide the No. of vehicles
	infracting simultaneously in each lane. The
	vehicles will be clearly identifiable and
	demarcated in the image produced by the camera system
e.	The system shall be equipped with IR Illuminator to ensure clear images including illumination of the Number Plate and capture the violation image under low light conditions and night time.
4	**Speed**
a.	Speed measurement may be made by using non-intrusive technology such as Radar/sensor/camera/virtual based or any other appropriate certified technology. CE and homologation certificate from Ministry of Traffic or equivalent department from respective country of origin, document authenticated by Indian Embassy (to authenticate that systems are legalized and tested for infractions to avoid legal issues) or Certificate from internationally accredited metrology laboratories (approved for speed calibration) is
	acceptable
5	**On site-out station processing unit**
	communication & Electrical Interface
a.	The system should automatically reset in the event of a program hang up and restart
	after power failure.
b.	The system should have secure access mechanism for validation of authorised
	personnel
c.	Deletion or addition and transfer of data should only be permitted to authorised
	users.
d.	A log of all user activities should be
	maintained in the system
e.	Roles and Rights of users should be defined
	in the system
f.	The data shall be transferred to the Interim
	ICCC/ICCC in real time for verification of the infraction and processing of challan.

#	Description
g.	In the event that the connectivity to the Interim ICCC/ICCC is not established then all data pertaining to the infraction shall be stored on site and will be transferred once the connectivity is re-established
	automatically.
6	**Mounting structure**
a.	Should be cantilever mounted and shall have minimum 6 Mtrs. height with appropriate vertical clearance under the system from the Road surface to ensure no
	obstruction to vehicular traffic.
b.	It should be capable to withstand high wind speeds and for structural safety, the successful bidder has to provide structural safety certificate from qualified structural engineers approved/ certified by Govt.
	Agency.
c.	Rugged locking mechanism should be
	provided for the onsite enclosures and cabinets.
7	**Speed Violation Application**
a.	It should be capable of importing violation data for the Operator for viewing and retrieving the violation images and data for further processing. The programme should
	provide for sort, transfer & print command.
b.	It should generate the photograph of violations captured by the outstation system which include a wider view covering the violating vehicle with its surrounding and a closer view indicating readable registration number plate patch of the violating vehicle or its web link on notices
	for court evidence.
c.	All outstation units should be configurable
	using the software at the Central Location
d.	Violation retrieval could be sorted by date, time, location and vehicle registration number and data structure should be compatible with Gandhinagar Traffic Police database and Gandhinagar Transport
	department database structure.
e.	The operator at the back office should be able to get an alarm of any possible fault(s) at the camera site (outstand) (e.g. sensor failure, camera failure, failure of linkage with traffic signal, connectivity failure,
	Camera tampering , sensor tampering)
f.	The automatic number plate recognition
	Software may be part of the supplied system, or can be provided separately as
	add on module to be integrated with violation detection. a.) Success rate of ANPR will be taken as 80% or better during the day time and 60% or better during the night
	time on standard number plates.

#	Description
g.	Image zoom function for number plate and images should be provided. Any updates of the software available, shall be updated free of cost during the contract period by the vendor and will integrate the same with existing application and database of Gandhinagar Traffic Police and Gandhinagar
	Transport department.
h.	The application software should be integrated with the notice branch software for tracing the ownership details of the violating vehicle and issuing/printing
	notices.
i.	Various users should be access the system using single sign on and should be role based. Different roles which could be defined (to be finalized at the stage if SRS) could be Administrator, Supervisor, Officer,
	Operator, etc.
j.	Apart from role based access, the system
	should also be able to define access based on location.
k.	Rights to different modules / Sub-Modules / Functionalities should be role based and proper log report should be maintained by
	the system for such access
l.	Important technical components of the architecture must support scalability to provide continuous growth to meet the growing demand of Gandhinagar Police. The system shall support vertical scalability so that depending on changing requirements from time to time, the system may be scaled upwards. There must not be any system imposed restrictions on the upward scalability. Main technological components requiring scalability are Storage, Bandwidth, Computing Performance (IT Infrastructure), Software / Application performance and advancement in proposed
	system features.
m.	The system shall also support horizontal
	scalability so that depending on changing
	requirements from time to time, the system
	may be scaled horizontally.
n.	Components of the architecture must provide redundancy and ensure that are no single point of failures in the key project components. Considering the high sensitivity of the system, design shall be in such a way as to be resilient to technological sabotage. To take care of remote failure, the systems need to be configured to mask and
	recover with minimum outage.

#	Description
o.	The architecture must adopt an end-to-end security model that protects data and the infrastructure from malicious attacks, theft, natural disasters etc. provisions for security of field equipment as well as protection of the software system from hackers and other threats shall be a part of the proposed system. Using Firewalls and Intrusion detection systems such attacks and theft shall be controlled and well supported (and implemented) with the security policy. The virus and worms attacks shall be well defended with Gateway level Anti-virus system, along with workstation level Anti- virus mechanism. There shall also be an endeavour to make use of the SSL/VPN technologies to have secured communication between Applications and its end users. Furthermore, all the system logs shall be properly stored & archived for future analysis and forensics whenever
	desired.
p.	Ease of configuration, ongoing health monitoring, and failure detection are vital to the goals of scalability, availability, and security and must be able to match the
	growth of the environment.
q.	System shall use open standards and
	protocols to the extent possible
r.	The user interface should be user friendly and provide facility to user for viewing, sorting and printing violations. The software should also be capable of generating query based statistical reports
	on the violation data.
s.	The data provided for authentication of
	violations should be in an easy to use format as per the requirements of user unit.
t.	User should be provided with means of listing the invalid violations along with the reason(s) of invalidation without deleting
	the record(s).
u.	Basic image manipulation tools (zoom etc.) should be provided for the displayed image but the actual recorded image should never
	change.
v.	Log of user actions be maintained in read only mode. User should be provided with the password and ID to access the system
	along with user type (admin, user).
w.	Image should have a header and footer depicting the information about the site IP and violation details like viz. date, time, equipment ID, location ID, Unique ID of each violation, lane number, Regn. Number of violating vehicle and actual violation of violating vehicle etc. so that the complete lane wise junction behaviour is recorded viz. (Speed of violating vehicle, notified speed limit, Speed Violation with Registration Number Plate Recognition facility. Number plate of cars, buses/HTVs should be readable automatically by the software/interface. There should be user interface for simultaneous manual authentication / correction and saving as
	well

#	Description
x.	Number plate of cars, buses/HTVs should be readable automatically by the software/interface. There should be user interface for simultaneous manual authentication / correction and saving as
	well.
y.	Interface for taking prints of the violations
	(including image and above details).

42.5 Technical Specifications: Red Light Violation Detection Systems

#	Parameter
1	**Make Provided in RFP**
2	**Model Provided in RFP**
3	**General**
	The system should be capable of generating a video & minimum 3 snapshot in any of the standard industry formats (MJPEG, JPG, avi, mp4, mov, etc) with at least 10 frames per second. The video shall be from t-5 to t+5 sec of the violation and should also be recorded (being the instant at which the infraction occurred).
4	**Digital Network Camera**
a.	Video Compression
b.	Video Resolution
c.	Frame rate
d.	Image Sensor
e.	Lens Type
f.	Lens#
g.	Minimum Illumination
h.	IR Cut Filter
i.	Day/Night Mode
j.	S/N Ratio
k.	Auto adjustment
	+ Remote Control of Image settings
l.	Local storage
m.	Protocol
n.	Security
o.	Operating conditions
p.	Casing
q.	Intelligent Video

#	Parameter
r.	Alarm I/O
s.	Certification
5	**On site-out station processing unit communication & Electrical Interface (Junction Box)**
a.	Data Storage on site
b.	Network Connectivity
c.	Minimum 2(two) USB Port to support the latest external mass storage devices and Ethernet (10/100) Port for possible networking. However all logs of data transfer through the ports shall be maintained by the system.
d.	The system should be capable of working in ambient temperature range of 0_oC to 60_oC.
e.	Lightening arrester shall be installed for safety of system (As per BIS standard IS 2309 of 1989).
f.	The housing(s) should be capable of withstanding vandalism and harsh weather conditions and should meet IP66, IK10 standards (certified).
6	**Violation Transmission and Security**
a.	Encrypted data, images and video pertaining to Violations at the Onsite processing station should be transmitted to the Interim ICCC/ICCC electronically through GPRS based wireless technology with 3G upgradable to 4G, or wired connectivity if available in Jpeg format
b.	Advanced Encryption Standard (AES) shall be followed for data encryption on site and Interim ICCC/ICCC, and its access will protected by a password.
c.	The vendor shall ensure that the data from the onsite processing unit shall be transferred to Interim ICCC/ICCC within one day.
7	**Video Recording**
a.	The system should be capable of continuous video recording in base station for 7 days. The system shall automatically overwrite the data after 7 days. It should be noted that at any point of time the local storage at the base station should have the data of previous 7 days.
b.	Direct extraction through any physical device like USB flash drive , Portable Hard disk etc. shall be possible

42.6 Technical Specifications: Speed Violation Detection System

#	Parameter	
1	**Make Provided in RFP**	
	Model Provided in RFP	
	The system should be capable of generating a video & minimum 3 snapshot in any of the standard industry formats (MJPEG, JPG, avi, mp4, mov, etc)	

#	Parameter	
	with at least 10 frames per second. The video shall be from t-5 to t+5 sec of the violation and should also be recorded (being the instant at which the infraction occurred).	
	Speed	
	Unit of Speed Measurement	Kmph
	Speed detection system to Capture speed	200Kmph ± 5%
	Speed Threshold	(Vendor should provide manufacturer certificate/third party test report in support of their claim)
d.	Speed Enforcement Technology	Radar/Laser/Others
3.	**Digital Network Camera**	
1.	Video Compression	H.264
2.	Video Resolution	1920 X 1080
3.	Frame rate	Min. 60 fps
4.	Image Sensor	1/3" Progressive Scan CCD / CMOS
5.	Lens Type	Varifocal, C/CS Mount, IR Correction full HD lens
6.	Lens#	Auto IRIS 5~50mm /8 – 40 mm, F1.4
7.	Minimum Illumination	Colour: 0.5 lux, B/W: 0.1 lux (at 30 IRE)
8.	IR Cut Filter	Automatically Removable IR-cut filter
9.	Day/Night Mode	Colour, Mono, Auto
10.	S/N Ratio	≥ 50 Db
11.	Auto adjustment + Remote Control of Image settings	Colour, brightness, sharpness, contrast, white balance, exposure control, backlight compensation, Gain Control, Ture Wide Dynamic Range
12.	Audio	Audio Capture Capability, G.711, G.726
13.	Local storage	Minimum 64 GB Memory card in a Memory card slot. In the event of failure of connectivity to the central server the camera shall record video locally on the SD card automatically. After the connectivity is restored these recordings shall be automatically merged with the server recording such that no manual intervention is required to transfer the SD card based recordings to server.
14.	Protocol	IPV4, IPV6, HTTP, HTTPS, FTP/SMTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, NTP, QoS, ONVIF Profile S
15.	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption
16.	Operating conditions	0 to 50°C (temperature), 50 to 90% (humidity)

#	Parameter	
17.	Casing	NEMA 4X / IP-66, IK10 rated
18.	Intelligent Video	Motion Detection & Tampering alert
19.	Alarm I/O	Minimum 1 Input & 1 Output contact for 3rd part interface
20.	Certification	UL/EN, CE,FCC
1.	**Recording & display information archive medium**	
a.	The system should be capable of recording the following details of the infracting vehicles	
b.	• Computer generated unique ID of each violation • Date (DD/MM/YYYY) • Time (HH:MM:SS) • Equipment ID • Location ID • Carriageway or direction of violating vehicle • In cases when multiple infracting vehicles are detected in one instant the system should be capable to provide the following data for all Infracting vehicles detected o Type of Violation o Notified speed limit (in Kmph) o Speed of violating vehicle (in Kmph) o Lane Number of violating vehicle o Registration Number of violating vehicle	
1.	**On site-out station processing unit communication & Electrical Interface**	
a.	Data Storage on site	The system should be equipped with appropriate storage capacity for 7 days 24X7 recording, with overwriting capability. The images should be stored in tamper proof format only.
b.	Network Connectivity	Wired/GPRS based wireless technology with 3G upgradable to 4G capability.
c.	Minimum 2(two) USB Port to support the latest external mass storage devices and Ethernet (10/100) Port for possible networking. However all logs of data transfer through the ports shall be maintained by the system.	
d.	The system should be capable of working in ambient temperature range of 0 degree C to 60 degree C	
e.	Atleast one hour UPS power back up to keep the system functional in case of power failure without any break in recording the violation.	

#	Parameter	
f.	Lightening arrester shall be installed for safety of system (As per BIS standard IS 2309 of 1989)	
g.	The housing(s) should be capable of withstanding vandalism and harsh weather conditions and should meet IP66, IK10 standards (certified).	
2.	**Violation Transmission and Security**	
a.	Encrypted data, images and video pertaining to Violations at the Onsite processing station should be transmitted to the Interim ICCC/ICCC electronically through GPRS based wireless technology with 3G upgradable to 4G or wired connectivity, in Jpeg format.	
b.	Advanced Encryption Standard (AES) shall be followed for data encryption on site and Interim ICCC/ICCC, and its access will protected by a password.	
c.	The vendor shall ensure that the data from the onsite processing unit shall be transferred to Interim ICCC/ICCC within one day.	
5.	**Video Recording**	
a.	The system should be capable of continuous video recording in base station for 7 days. The system shall automatically overwrite the data after 7 days. It should be noted that at any point of time the local storage at the base station should have the data of previous 7 days.	
b.	Direct extraction through any physical device like USB, Hard disk shall be possible	

42.7 Functional Requirements of Surveillance System

Functional Requirement of the overall Surveillance System can be categorised into following components:

1. Information to be Captured by Edge Devises
2. Information to be analysed at Interim ICCC/ICCC
3. Role Based Access to the Entire System
4. Storage / Recording Requirements
5. Other General Requirements

42.7.1 Information to be captured by Edge Devices

Surveillance Cameras being one of the core sub modules of ITMS, it is important that their selection and placement is carefully done to ensure the full coverage of the traffic junction along with all associated junction arms, accuracy of the information captured on the field and they are rugged, durable & compact. These cameras need to work on 24 X 7 basis and transmit quality video feeds to the Interim ICCC/ICCC and would capture the video feeds at 15 FPS during entire duration of day. However, Gandhinagar Police may

take the regular review of the requirements for video resolution, PS 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. It is estimated that not more than 5% of the cameras would be required to be viewed at higher FPS at a given point of time). Video feeds will be stored at 15 FPS for a minimum of 30 days at the Data Centre.

42.7.2 Information to be analyzed at ICCC

The proposed Video Management System should provide a complete end-to-end solution for security surveillance application. The control centre shall allow an operator to view live / recorded video from any surveillance camera on the IP network. The combination of control centre and the IP network would create a virtual matrix, which would allow switching of video streams around the system.

It has been envisaged that all surveillance cameras would not be simultaneously viewed at Interim ICCC/ICCC. The viewing shall vary from time to time which will help to manage traffic at the junctions and coordinate with the field police officers.

42.7.3 Role Based Access to the Entire System

Various users should have access to the system using single sign on and should be role based. Different roles which could be defined (to be finalized at the stage of implementation) could be Administrator, Supervisor, Officer, Operator, etc. Apart from role based access, the system should also be able to define access based on location. Other minimum features required in the role based authentication systems are as follows:

a. The management module should be able to capture basic details (including mobile number & email id) of the Police Personnel & other personnel requiring Viewing / Administration rights to the system. There should be interface to change these details, after proper authentication.
b. Rights to different modules / sub-modules / functionalities should be role based and proper log report should be maintained by the system for such access.
c. The system should be with login name & password enabled to ensure that only the concerned personnel are able to login into the system
d. There should be provision to specify hierarchy of operators / officers for control of the cameras from various locations.
e. The number of users shall increase as per phase wise implementation. MSI is expected to estimate and provision the same based on the phase wise requirements.
f. Windows Active Directory/LDAP or any such system can be used to design role based access.

42.7.4 Storage/Recording Requirements (table of storage requirements already provided in the RFP)

42.7.5 Other General Requirements

42.7.5.1 Management/Integration functionality

a. The Surveillance System shall offer centralised management of all devices, servers and users.
b. The Surveillance System should not have any limit on the number of cameras to be connected for Surveillance, Monitoring and recording. Any increase in the no. of cameras should be possible by

augmentation of Hardware components.

c. The Surveillance System should have ability to knit the video streams from multiple cameras, based on the date/time stamp. Every video stream shall have date, time, source camera location, FPS etc. water-marked. These attributes shall be finalised at the System Design time. There shall be a centralised NTP server, from which all devices shall synchronise the date and time.
d. The Surveillance System shall support distributed viewing of any camera in the system using Video walls or big screen displays.
e. The Surveillance System shall support alarm management. The alarm management shall allow for the continuous monitoring of the operational status and event-triggered alarms from system servers, cameras and other external devices.
f. It should be possible to integrate the Surveillance System with 3rd-party software, to enable the users to develop customized applications for enhancing the use of video surveillance solution. For e.g., integrating alarm management to initiate SMS, E-Mail, VoIP call etc.
g. It should be possible to integrate social media platforms to Surveillance System to enable Gandhinagar Police to track and monitor certain trending incident or crime.
h. The Management system shall store the overall network elements configuration in central database, either on the management server computer or on a separate DB Server on the network.
i. System should be able to be integrated with Event Management / Incident Management System, if implemented by Gandhinagar Police in future.

42.7.5.2 System Administration functionality

a. The System Administration Server shall provide a feature-rich administration client for system configuration and day-to-day administration of the system
b. The System Administration Server shall support different logs related to the Management Server
    - The System Log
    - The Audit Log
    - The Alert Log
    - The Event Log

42.7.5.3 Rules

The system shall support the use of rules to determine when specific actions occur. Rules shall define what actions shall be carried out under specific conditions. The system shall support rule initiated actions such as:

- Start and stop recording
- Set non-default live frame rate
- Set non-default recording rate
- Start and stop PTZ patrolling
- Send notifications via email
- Pop-up video on designated Client Monitor recipients

42.7.5.4 Client System

a. The Client system shall provide remote users with rich functionality and features as described below.
b. Viewing live video from cameras on the surveillance system
c. Browsing recordings from storage systems
d. Creating and switching between multiple of views.
e. Viewing video from selected cameras in greater magnification and/or higher quality in a designated hotspot.
f. Controlling PTZ cameras.
g. Using digital zoom on live as well as recorded video.
h. Using sound notifications for attracting attention to detected motion or events.
i. Getting quick overview of sequences with detected motion.
j. Getting quick overviews of detected alerts or events.
k. Quickly searching selected areas of video recording for motion (also known as Smart Search).

42.7.5.5 Remote Web Client

The web-based remote client shall offer live view of up to 16 cameras, including PTZ control and event / output activation. The Playback function shall give the user concurrent playback of multiple recorded videos with date, alert sequence or time searching.

a. User Authentication – The Remote Client shall support logon using the user name and password credentials

42.7.5.6 Matrix Monitor

a. Matrix Monitor – The Matrix Monitor feature shall allow distributed viewing of multiple camera on the system on any monitor
b. The Matrix Monitor feature shall access the H.264/MJPEG/MPEG4 stream from the connected camera directly and not sourced through the recording server

42.7.5.7 Alarm Management Module

a. The alarm management module shall allow for continuous monitoring of the operational status and event-triggered alarms from various system servers, cameras and other devices. The alarm management module shall provide a real-time overview of alarm status or technical problems while allowing for immediate visual verification and troubleshooting.
b. The alarm management module shall provide interface and navigational tools through the client including;
    - Graphical overview of the operational status and alarms from servers, network cameras and external devices including motion detectors and access control systems.
    - Intuitive navigation using a map-based, hierarchical structure with hyperlinks to other maps, servers and devices or through a tree-view format.
c. The module shall include flexible access rights and allow each user to be assigned several roles where each shall define access rights to cameras.

d. Basic VMS should be capable to accept third party generated events / triggers
e. Based on alarms/alerts, customised/standard alert messages should be published on VMB/PA, after authorisation by a supervisor/operator.

42.7.5.8 Other miscellaneous requirement

a. System should have a facility to create CDs or other storage media for submission to Judiciary, which can be treated evidence for legal matters. Such storage media creation should be tamper proof and MSI to provide appropriate technology so that integrity and quality of evidence is maintained as per requirements of the judiciary. Bidder is required to specify any additional hardware / software required for this purpose & the same can be listed in miscellaneous section of the commercial bid. MSI will also prepare the guideline document to be followed by the Police Personnel for the retrieval of Video / images from the CCTV System so as to maintain integrity of the evidence. Such a guideline document should include methods of retrieval of data, check-list to be followed and flowchart of the entire process to be followed.
b. All the systems proposed and operationalisation of Video Management System should comply with requirements of IT Acts.
c. Any hardware or software required to achieve the functional requirement and technical solution of the overall Project (may not be not specified in the schedule) is to be proposed in the Bid and borne by the MSI.
d. Bidder shall be required to provide a standardized Mobile Application to integrate smart phones and tablets for 2-way communication with the Surveillance System in a secure manner. Gandhinagar Police may provide such tablets / smart phones to the designated Police Personnel. It will be responsibility of MSI to configure such tablets / Smartphone, for the Surveillance System being implemented a part of this project, and ensure that all the necessary access is given to these mobile users. Functionalities to be provided through mobile application: Viewing of any video steam from Central VMS, uploading of video / pictures central VMS, Location based GIS Map access, tagging of mobile device/location information for all relevant functionalities.
e. Gandhinagar Police/GSCDL reserves the right to appoint any Independent Evaluation Agency at any time during the phases of the project.

42.8 Technical Specifications - Surveillance System

42.8.1 PTZ Cameras

Sr.No.	Parameters	Description
1.	**Make**	Provided in RFP
2.	**Model**	Provided in RFP
3.	Video Compression	H.264
4.	Video Resolution	1920 X 1080
5.	Frame rate	Min. 25 fps
6.	Image Sensor	1/3" OR ¼" Progressive Scan CCD / CMOS
7.	Lens	Auto-focus, 4.3 - 129 mm (corresponding to 30x)

Sr.No.	Parameters	Description
8.	Minimum Illumination	Colour: 0.5 lux, B/W: 0.1 lux (at 30 IRE)
9.	Day/Night Mode	Colour, Mono, Auto
10.	S/N Ratio	≥ 50dB
11.	PTZ	Pan: 360° endless/continuous, 0.2 to 300°/s (auto), 0.2 to 100°/s (Manual) Tilt: 90°, 0.2 to 100°/s (Auto), 0.2 to 40°/s (Manual)
		30x optical zoom and 10x digital zoom 64 preset positions Auto-Tracking Pre-set tour
12.	Auto adjustment + Remote Control of Image settings	Colour, brightness, sharpness, contrast, white balance, exposure control, backlight compensation, Gain Control, Wide Dynamic Range
13.	Protocol	HTTP, HTTPS, FTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, QoS, IPV4, IPV6, ONVIF Profile S
14.	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption
15.	Operating conditions	0 to 50°C (temperature), 50-90% humidity
16.	Casing	NEMA 4X / IP-66 rated
17.	Certification	UL/EN,CE,FCC
18.	IR	Internal/External. IR range should be 100 mtr or better

42.8.2 Fixed Box Camera

Sr.No.	Parameters	Description
1.	**Make**	Provided in RFP
2.	**Model**	Provided in RFP
3.	Video Compression	H.264
4.	Video Resolution	1920 X 1080
5.	Frame rate	Min. 30 fps
6.	Image Sensor	1/3” Progressive Scan CCD/ CMOS
7.	Lens Type	Varifocal, C/CS Mount, IR Corrected Full HD
8.	Lens#	Auto IRIS 5~50mm/ 8 – 40 mm, F1.4
9.	Minimum Illumination	Colour: 0.5 lux, B/W: 0.1 lux (at 30 IRE)
10.	IR Cut Filter	Automatically Removable IR-cut filter
11.	Day/Night Mode	Colour, Mono, Auto
12.	S/N Ratio	≥ 50 dB
13.	Auto adjustment + Remote Control of Image settings	Colour, brightness, sharpness, contrast, white balance, exposure control, backlight compensation, Gain Control, Wide Dynamic Range
15.	Protocol	IPV4, IPV6, HTTP, HTTPS, FTP/SMTP, NTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, QoS, ONVIF Profile S
16.	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption
17.	Operating conditions	0 to 50°C (temperature), 50 to 90% (humidity)

Sr.No.	Parameters	Description
18.	Intelligent Video	Motion Detection & Tampering alert
19.	Alarm I/O	Minimum 1 Input & 1 Output contact for 3rd part interface
20.	Casing	NEMA 4X / IP-66 rated, IK10
21.	Certification	UL/EN, CE,FCC

42.8.3 IR Illuminators

Sr.No.	Parameters	Description
1.	**Make**	Provided in RFP
2.	**Model**	Provided in RFP
3.	Range	Min. 100 meters, with adjustable angle to cover the complete field of view at specified locations
4.	Minimum Illumination	High sensitivity at Zero Lux
5.	Power	Automatic on/off operation
6.	Casing	NEMA 4X / IP-66 rated
7.	Operating conditions	-0° to 50°C
8.	Certification	UL/EN/CE/FCC

42.8.4 Fixed Bullet IR Cameras

#	Parameters	Minimum Specifications or better
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	Video Compression	H.264
4	Video Resolution	1920 X 1080
5	Frame rate	Min. 25 fps
6	Image Sensor	1/3” OR ¼” Progressive Scan CCD / CMOS
7	Lens	Fixed 3.6mm or better
8	Minimum Illumination	Colour: 0.5 lux, B/W: 0 lux with IR On
9	IR Range	20 Mtrs or better
10	Day/Night Mode	Colour, Mono, Auto
11	S/N Ratio	≥ 50dB
12	Auto adjustment + Remote Control of Image settings	Colour, brightness, sharpness, contrast, white balance, exposure control, backlight compensation, Gain Control, Wide Dynamic Range
13	Protocol	HTTP, HTTPS, FTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, QoS, IPV4,
		IPV6, ONVIF Profile S
14	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption
15	Operating conditions	0 to 50°C (temperature), 50-90% humidity
16	Casing	NEMA 4X / IP-66 rated and IK10 rated
17	Certification	UL/EN,CE,FCC

#	Parameters	Minimum Specifications or better
18	Local storage	Minimum 64 GB Memory card in a Memory card slot. In the event of failure of connectivity to the central server the camera shall record video locally on the SD card automatically. After the connectivity is restored these recordings shall be automatically merged with the server recording such that no manual intervention is required to transfer the SD card based recordings to server.
19	Power Source	PoE, 12V

42.8.5 Network Video Recorder

#	Parameter	Minimum Specifications or better
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	Input	8 channel IP camera inputs
4	Output	1 VGA, 1 HDMI
5	Support for Two- way Talk	1 channel Input, 1 channel Output
6	OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording
7	Video/Audio Compression	H.264 / MJPEG / PCM
8	Resolution	1080P (1920×1080) /
		720P(1280×720) / D1 (704×576 / 704×480)
9	Record Rate	25 FPS@1080P for each channel
10	Bit Rate	48~8192Kb/s
11	Record Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop
12	Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
13	Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search
14	Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom
15	Ethernet	RJ-45 port (10/100/1000M)
16	Network Functions	TCP/IP, UDP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP,
		Email, Alarm Server
17	Internal HDD	Minimum 2 HDD slots with each capacity of 4TB with RAID 0 (mirroring) support.. Should be provided with appropriate storage to meet the functional requirements.
18	USB	Minimum 2 port
19	Working Environment	0°C to 50°C / 0% to 90% RH
20	Certification	UL/EN, CE, FCC
21	Protocol	ONVIF

42.8.6 Public Address System

#	Parameter	Minimum Specifications or better
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	PAS system	Should have the capability to control individual PAS
		i.e. to make an announcement at select location (1:1) and all locations (1: many) simultaneously.
		The PAS should also support both, Live and Recorded inputs
4	Speaker	Minimum 2 speakers, To be used for Public Address System
5	Connectivity	IP Based
6	Access Control	Access control mechanism would be also required to establish so that the usage is regulated.
7	Integration	With VMS and Command and Control Center
8	Construction	Cast Iron Foundation and
		M.S. Pole, Sturdy Body for equipment
9	Battery	Internal Battery with different charging options (Solar/Mains)
10	Power	Automatic on/off operation
11	Casing	IP-55 rated for housing
12	Operating conditions	0° to 50°C

42.8.7 Emergency Call Box System

1. A high quality digital transceiver, to be placed at certain traffic junctions determined by the Police Department (mostly at junction boxes / camera poles to avoid any additional investments) Key is to make it easily accessible by public
2. The unit shall preferably have a Double button which when pressed, shall connect to the /ICCC/Police Command Center/other locations over the existing network infrastructure setup for ATCS project.

Sr. No	Parameter	Minimum Specifications or better
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	Construction	Cast Iron/Steel Foundation, Sturdy Body for equipment
4	Call Button	Watertight Push Button, Visual Feedback for button press
5	Speaker	To be used for Public Address System
6	Connectivity	GSM/PSTN/Ethernet as per solution offered

Sr. No	Parameter	Minimum Specifications or better
7	Sensors	For tempering/Vandalism
8	Battery	Internal Battery with different charging options (Solar/Mains)
9	Power	Automatic on/off operation
10	Casing	IP-55 rated for housing
11	Operating conditions	0° to 50°C

42.8.8 Field Junction Box

#	Parameter	Minimum Specifications
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	Size	Suitable size as per site requirements to house the field equipment
4	Cabinet Material	GI with powder coated
5	Material Thickness	Min 1.2mm
6	Number of Locks	Two
7	Protection	IP 55, Junction Box design should ensure to keep the temperature within suitable operating range for equipment's and should also avoid intentional water splash and dust intake
8	Mounting	On Camera Pole / Ground mounted on concrete base
9	Form Factor	Rack Mount/DIN Rail
10	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.

42.8.9 Poles for Camera

#	Parameter	Minimum Specifications
1	**Make**	Provided in RFP
2	**Model**	Provided in RFP
3	Pole type	Hot Dip Galvanized after Fabrication with Silver coating of 86 micron as per IS:2629; Fabrication in accordance with IS-2713 (1980)
4	Height	5-10 Meters (or higher),
		as-per-requirements for
		different types of cameras & Site conditions
5	Pole Diameter	Min. 10 cm diameter pole (bidder to choose larger diameter for higher height)
6	Cantilevers	Based on the location requirement suitable size cantilevers to be considered with the pole

#	Parameter	Minimum Specifications
7	Bottom base plate	Minimum base plate of size 30x30x1.5 cm
8	Mounting facilities	To mount RLVD Cameras, ANPR, Speed detection sensors, CCTV cameras, Traffic Signals, Pedestrian Signals, Switch, etc.
9	Pipes, Tubes	All wiring must be hidden, through tubes/pipes. No wires shall be visible from outside.
10	Foundation	Casting of Civil Foundation with 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.
		Please refer to earthing standards mentioned elsewhere in the document.
11	Protection	Lightning arrester shall be provided, to protect all field equipment mounted on pole.

42.8.10 Edge Level Switch (at Traffic Junctions) (Edge Level Switch(at Field Locations)

#	Parameter	Specifications
1.	Port Density & Redundancy	The switch should be rugged outdoor DIN rail mountable 8 ports 10/100/1000TX PoE+(min. 4 Port IEEE802.3at Or 8 Port 802.3af) and with 2 100/1000x SFP ports May require higher port density at some locations, depending upon site conditions
2.	PoE Standard	IEEE 802.3af/ IEEE 802.3at or better on all ports simultaneously
3.	Quality of Service	Support for Egress rate limiting, Eight egress queues per port, Voice VLAN, DSCP for IP-based QoS, Differentiated services architecture, IEEE 802.1p Class of Service with strict and weighted round Robin scheduling.
4.	Multicast support	IGMP Snooping V1, V2, V3
5.	Management	SNMP V1,V2,V3, Web GUI, CLI, USB or equivalent memory card, IP v6 management feature on open standards, IEEE802.1ag, TDM or equivalent standards
6.	Security	Should support Access Control Lists (ACLs), DHCP snooping, IEEE802.1x based port authentication, RADIUS, TACACS, SSL, SSH, port mirroring, NTP

#	Parameter	Specifications
7.	Resiliency	IEEE802.1q, IEEE802.1d, IEEE802.1s, IEEE802.1w, ring resilience/ring protection
8.	PoE Power per port	Sufficient to operate the CCTV cameras/edge devices connected
9.	Enclosure Rating	IP 30 or equivalent Industrial Grade Rating(to be housed in Junction box)
10.	Operating Temperature	0 -60 C or better Industrial Grade Rating
11.	Safety Certifications	UL/EN/IEC or equivalent, RoHS standards, NEMA –TS2

42.8.11 Online UPS for field locations

Sr No	Parameter	Minimum Specifications		
1.	**Make**	Provided in RFP		
2.	**Model**	Provided in RFP		
3.	Capacity	Adequate capacity to cover all above IT Components at respective field locations		
4.	Technology	IGBT based PWM Technology, True Online UPS		
5.	Input Frequency Range	45 to 55 Hz		
6.	Output Frequency Range	45 to 55 Hz		
7.	Output Voltage	220VAC - 230VAC		
8.	Voltage Regulation	+/-2% (or better) and with built- in Over Voltage Cut off facility in the Device		
9.	Frequency	50 Hz +/- 0.1% (free Run Mode)		
10.	Harmonic Distortion (THD)	< 3% (linear load)		
11.	Output Waveform	Pure Sine wave		

Sr No	Parameter	Minimum Specifications		
12.	Output Power Factor	0.8 or more		
13.	Battery Backup	Adequate and required battery backup to achieve required uptime of field device as well as SLA of the overall solution..		
14.	Battery Type	Lead acid, Sealed Maintenance Free (SMF)		

42.8.12 ANPR System

The ANPR System shall enable monitoring of vehicle flow at strategic locations. The system shall support real-time detection of vehicles at the deployed locations, recording each vehicle, reading its number plate, database lookup from central server and triggering of alarms/alerts based on the vehicle status and category as specified by the database. The system usage shall be privilege driven using password authentication.

1.	**Make**	Provided in RFP	
2.	**Model**	Provided in RFP	
3.	**Vehicle Detection by Color** The system shall detect the color of all vehicles in the camera view during daytime and label them as per the predefined list of configured system colors. The system will store the color information of each vehicle along with the license plate information for each transaction in the database. The system shall have options to search historical records for post event analysis by the vehicle color or the vehicle color with license plate and date time combinations		

4.	**Alert Generation** The system should have option to input certain license plates according to the hot listed categories like "Wanted", "Suspicious","Stolen", etc by authorized personnel. The system should be able to generate automatic alarms to alert the control room personnel for further action, in the event of detection of any vehicle falling in the hot listed categories.		
5.	**Vehicle Status Alarm Module** On successful recognition of the number plate, system should be able generate automatic alarm to alert the control room for vehicles which have been marked as "Wanted", "Suspicious", "Stolen", "Expired". (System should have provision/expansion option to add more categories for future need). The Instantaneous and automatic generation of alarms. In case of identity of vehicle in any category which is define by user.		
6.	**Vehicle Log Module** The system shall enable easy and quick retrieval of snapshots, video		

43. Inventory Details

Selected Bidder is required to take complete handover and update the list given below. The said list though exhaustive, will need to be updated completely by the Selected Bidder in case of any additions. It will be Selected Bidder's responsibility to ensure that the entire inventory is updated and project performance is not affected. The list must be updated on regular basis and submitted to GSCDL on monthly basis.

43.1 APIs

Sl. No.	Name of Web/Mobile/APIs Application /Endpoint device/ Service (As per Scope of Audit)	Network type in which it is installed (i.e. Public/Private)	Location of installation [Work Area/ Service Module and placement/installation	OEM/Supplier name and Country of origin [Manufacture details of Device/Software/ Service]
1	Cisco	Private	Data Center	OEM-Cisco Name and Country of origin-USA

Sl. No.	Name of Web/Mobile/APIs Application /Endpoint device/ Service (As per Scope of Audit)	Network type in which it is installed (i.e. Public/Private)	Location of installation [Work Area/ Service Module and placement/installation	OEM/Supplier name and Country of origin [Manufacture details of Device/Software/ Service]
				Manufacture details-Services
2	Coral	Private	Data Center	OEM-Coral Telecom Name and Country of origin-India Manufacture details-Services
3	Smart Pole	Private	Data Center/On Cloud	OEM-Amnex Name and Country of origin-India Manufacture details-Services
4	ATCS	Private	Data Center/On Cloud	OEM-Efftronics/Amnex Name and Country of origin-India Manufacture details-Services
5	VMSB	Private	Data Center/On Cloud	OEM-Energasia Name and Country of origin-India Manufacture details-Services
6	TES	Private	Data Center/On Cloud	OEM-Lookman/Videonetics Name and Country of origin-India Manufacture details-Services
7	PA &ECB	Private	Data Center/On Cloud	OEM-Prolink Name and Country of origin-India Manufacture details-Services
8	VMD	Private	Data Center/On Cloud	OEM-Atriyo Name and Country of origin-India Manufacture details-Services
9	ITMS	Private	Data Center/On Cloud	OEM-Amnex Name and Country of origin-India Manufacture details-Services

Sl. No.	Name of Web/Mobile/APIs Application /Endpoint device/ Service (As per Scope of Audit)	Network type in which it is installed (i.e. Public/Private)	Location of installation [Work Area/ Service Module and placement/installation	OEM/Supplier name and Country of origin [Manufacture details of Device/Software/ Service]
10	SWM	Private	Data Center/On Cloud	OEM-Amnex Name and Country of origin-India Manufacture details-Services
11	Environmental Sensors	Private	Data Center/On Cloud	OEM-Oizom Name and Country of origin-India Manufacture details-Services
12	CCTV	Private	Data Center/On Cloud	OEM-Mirasys Name and Country of origin-India Manufacture details-Services

43.2 End Point Devices Consolidated

End Point Device Wise Status									
#	**Device type**	**Make**	**Model**	**Firmware Version**	**No of items**	**Purpose of the Device**	**Country of Origin**	**Remarks**	**Status of Information required for OW ASP L2**
1	ACCESS CONTROL	Matrix	V01R28	V01R28/V03 R26	4	Attendance Report	India	NA	NA
2	ACCESS CONTROL	Secureye	S-B251CB	N/A	1	Attendance Report	India	NA	NA
3	ANPR	Secura	DS-2CD4C36FWD-AP / DS-2CD5026G0-AP	V5.7.1 build 211203 / V5.6.12 build 200729	142	Automatic Number Plate Recognition	India	NA	NA
4	ANPR	Hikvision	SIP-20EH5W-BO4	7.2.1.611 Oct	146	Automatic Number Plate Recognition	India	On RLVD/SVD Junctions	NA
5	ATCS Camera	Dahua	ITC431-RW1F-IRL8 / ITC231-RF1A-IR	4.001.00AT001.0.R / 2.622.0012000.0.R, build	136	Vehicle detection of camera	India	Adaptive Traffic Control System	NA
6	ICCC Camera (Bullet	Secura	SIP-20EH537W-D4S / SIP-20EH4W-BO2	IPC_G6103-B0007P31D1708C42/ IPC_HCMN2108-	14	CCTV	India	ICCC Control	NA

End Point Device Wise Status									
#	**Device type**	**Make**	**Model**	**Firmware Version**	**No of items**	**Purpose of the Device**	**Country of Origin**	**Remarks**	**Status of Information required for OWASP L2**
	/Dome)			B0002P20D1702				Room cameras	
7	ATCS Controller	Efftronics	TLCMCGH01	N/A	20	Control of Junction	India	NA	NA
8	ATCS Controller	Atriyo	SYNCNEX– NX0801	N/A	15	Control of Junction	India	NA	NA
9	ECB	Zenitel	TCIS-1/TCIS-2/TCIS-3 / TCIS-4	6.4.3.1 (vsft) / 4.11.3.0 (vsft)	17	Emergency calling box	India	NA	NA
10	Energy Meter	ATC	ATC-1200	N/A	38	power consumption	India	NA	NA
11	Envirment Sensor	OIZOM	AS-1ESNDV.12	N/A	38	Measure the environmental conditions of the data center such as the temperature and humidity	India	NA	NA
12	General surveillance/PTZ Camera	Secura	SIP-EB201	IPC_HCMN2108-B0008P10D1806C20	147	General surveillance	India	NA	NA
13	General surveillance/P	Hikvision	DS-2DE7232IW-AE / DS-2CD4C36FWD-AP	V5.7.1 build 211203	135	General surveillance	India	NA	NA

End Point Device Wise Status									
#	**Device type**	**Make**	**Model**	**Firmware Version**	**No of items**	**Purpose of the Device**	**Country of Origin**	**Remarks**	**Status of Information required for OWASP L2**
	TZ Camera								
14	IP Phones	Coral	Connect-IP2LP	52.114.8.4	31	Calling Purpose	India	NA	NA
15	Laptop	DELL /HP	DELL Latitude 3460/ E5440	N/A	5	Laptop	India	NA	NA
16	Laptop	HP	HP 255 G8	N/A	2	Laptop	India	NA	NA
17	LPU	Videonetics	ITMS-LPU	20.04.2 LTS	23	Junction Image data store	India	NA	NA
18	LPU	Secura	SLPU7C-I7	18.04.2 LTS	71	Junction Image data store	India	NA	NA
19	Media Player	NovaStar	TB2-4G	N/A	9	Local storage of Image & Video	India	NA	NA
20	Network_switch	Digisol	DG-GS1510PL	2.0.2G Build 99967	6	Network device communication	India	NA	NA
21	Network_switch	Techroute	TR-IES-2510-P	1.4.15.705 (build-282)/1.1.0.1 (build-4.115)	284	Network device communication	India	NA	NA
22	NVR	Hikvision	DS-7608NI-I2	V4.51.025 build 210927	38	CCTV	India	NA	NA
23	NVR	Secura	SNVR-E0216	B3202P41C12210	18	CCTV	India	NA	NA
24	PA	Zenitel	ELSII-10HM / ENA2100-AC	7.4.3.0 (vsft)	35	Public Announcement System	India	NA	NA

End Point Device Wise Status									
#	**Device type**	**Make**	**Model**	**Firmware Version**	**No of items**	**Purpose of the Device**	**Country of Origin**	**Remarks**	**Status of Information required for OWASP L2**
25	Panic Button	raspberry pi	ePAC-2071	N/A	38	for emergency	India	NA	NA
26	Plotter	Canon	TX-5400	N/A	1	For Printing	India	NA	NA
27	Printer	Canon	IR 4551	N/A	2	For Printing	India	NA	NA
28	RLVD Camera	Secura	SIP-20SH5336W-P5S	7.2.1.611 Oct	63	RLVD For Red Light Violation/ Speed Violation detection	India	NA	NA
29	RLVD Camera	Hikvision	DS-2CD5026G0-AP	7.2.1.309	58	RLVD For Red Light Violation/ Speed Violation detection	India	NA	NA
30	SLS Dongle	TP-Link	UE300	N/A	9	Passs the data to media player	India	NA	NA
31	Video Wall Cotroller	ADVANTECH	610 H	Win 7 version	1	Monitoring Camera Feed and Applications	India	NA	NA
32	VMD	ATRIYO	e-VMD/18/942d	200.40.4CH 13/05/2019	38	For Display Temp. TEXT Advertisement	India	NA	NA
33	Server	HPE/ DELL /AWS	ProLiant DL360 Gen10/PowerEdge R230	1.0.8/N/A	61	Install Application, Database, Role	India	NA	NA

End Point Device Wise Status									
#	Device type	Make	Model	Firmware Version	No of items	Purpose of the Device	Country of Origin	Remarks	Status of Information required for OWASP L2
34	Storage	HPE	MSA 2060/MSA 2050	VL270P008/IXM110P001-06	4 (14 enclosure)	Storage Purpose	India	NA	NA
35	WIFI_AP	Cisco	AIR-AP1562I-D-K9	V03	48	Wifi Device	India	NA	NA
36	Work Station	Dell	Precision 3650 Tower/precision 3630 Tower/OptiPlex 3080	1.29.0 / 2.27.0	31	Work Station	India	NA	NA

43.3 End Point Devices Full List

43.3.1 ATCS Controller

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	ACA2200005	172.16.13.51	SYNCNEX–NX0801	ATCS Controller	GEB Colony Crossroads	ICCC	NA	ATRIYO	INDIA
2	N/A	ACA2200010	172.16.13.52	SYNCNEX–NX0801	ATCS Controller	Pethapur Crossroads	ICCC	NA	ATRIYO	INDIA
3	N/A	ACA2200004	172.16.13.53	SYNCNEX–NX0801	ATCS Controller	Randeja Crossroad	ICCC	NA	ATRIYO	INDIA
4	N/A	ACA2200003	172.16.13.54	SYNCNEX–NX0801	ATCS Controller	K-6	ICCC	NA	ATRIYO	INDIA
5	N/A	ACA2200009	172.16.13.55	SYNCNEX–NX0801	ATCS Controller	K-5	ICCC	NA	ATRIYO	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
6	N/A	ACA2200008	172.16.13.56	SYNCNEX–NX0801	ATCS Controller	Reliance Crossroad	ICCC	NA	ATRIYO	INDIA
7	N/A	ACA2200001	172.16.13.57	SYNCNEX–NX0801	ATCS Controller	K-7	ICCC	NA	ATRIYO	INDIA
8	N/A	ACA2200012	172.16.13.58	SYNCNEX–NX0801	ATCS Controller	KH-7	ICCC	NA	ATRIYO	INDIA
9	N/A	ACA2200006	172.16.13.59	SYNCNEX–NX0801	ATCS Controller	Vasana Hadmathiya (KH-0.5)	ICCC	NA	ATRIYO	INDIA
10	N/A	ACA2200002	172.16.13.60	SYNCNEX–NX0801	ATCS Controller	CHH-6	ICCC	NA	ATRIYO	INDIA
11	N/A	ACA2200011	172.16.13.61	SYNCNEX–NX0801	ATCS Controller	CHH-4A	ICCC	NA	ATRIYO	INDIA
12	N/A	ACA2200014	172.16.13.62	SYNCNEX–NX0801	ATCS Controller	KH-0	ICCC	NA	ATRIYO	INDIA
13	N/A	ACA2200013	172.16.13.63	SYNCNEX–NX0801	ATCS Controller	GH-0	ICCC	NA	ATRIYO	INDIA
14	N/A	ACA2200015	172.16.13.64	SYNCNEX–NX0801	ATCS Controller	Sarita Udhyan (J-3)	ICCC	NA	ATRIYO	INDIA
15	N/A	ACA2200007	172.16.13.65	SYNCNEX–NX0801	ATCS Controller	CH-7	ICCC	NA	ATRIYO	INDIA
16	NA	EFF/WMM/0006	172.16.7.11	TLCMCGH01	ATCS Controller	GH -2	ICCC	NA	Efftronics	INDIA
17	NA	EFF/WMM/0008	172.16.7.12	TLCMCGH01	ATCS Controller	GH-3	ICCC	NA	Efftronics	INDIA
18	NA	EFF/WMM/0005	172.16.7.13	TLCMCGH01	ATCS Controller	GH-7	ICCC	NA	Efftronics	INDIA
19	NA	EFF/WMM/0002	172.16.7.14	TLCMCGH01	ATCS Controller	GH-5	ICCC	NA	Efftronics	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
20	NA	EFF/WMM/0007	172.16.7.15	TLCMCGH01	ATCS Controller	GH-6	ICCC	NA	Efftronics	INDIA
21	NA	EFF/WMM/0009	172.16.7.16	TLCMCGH01	ATCS Controller	CH-3	ICCC	NA	Efftronics	INDIA
22	NA	EFF/WMM/0004	172.16.7.18	TLCMCGH01	ATCS Controller	CH-4 B	ICCC	NA	Efftronics	INDIA
23	NA	EFF/WMM/0001	172.16.7.19	TLCMCGH01	ATCS Controller	CH-5	ICCC	NA	Efftronics	INDIA
24	NA	EFF/WMM/0010	172.16.7.20	TLCMCGH01	ATCS Controller	CH-6	ICCC	NA	Efftronics	INDIA
25	NA	EFF/WMM/0005	172.16.8.57	TLCMCGH01	ATCS Controller	KH-3	ICCC	NA	Efftronics	INDIA
26	NA	EFF/WMM/0011	172.16.8.58	TLCMCGH01	ATCS Controller	KH-4 A	ICCC	NA	Efftronics	INDIA
27	NA	EFF/WMM/0006	172.16.8.59	TLCMCGH01	ATCS Controller	KH-4 B	ICCC	NA	Efftronics	INDIA
28	NA	EFF/WMM/007	172.16.8.60	TLCMCGH01	ATCS Controller	KH-5	ICCC	NA	Efftronics	INDIA
29	NA	EFF/WMM/0008	172.16.8.61	TLCMCGH01	ATCS Controller	KH-6	ICCC	NA	Efftronics	INDIA
30	NA	EFF/WMM/0001	172.16.8.62	TLCMCGH01	ATCS Controller	G-2	ICCC	NA	Efftronics	INDIA
31	NA	EFF/WMM/002	172.16.8.63	TLCMCGH01	ATCS Controller	G-3	ICCC	NA	Efftronics	INDIA
32	NA	EFF/WMM/0003	172.16.8.64	TLCMCGH01	ATCS Controller	G-5	ICCC	NA	Efftronics	INDIA
33	NA	EFF/WMM/0004	172.16.8.65	TLCMCGH01	ATCS Controller	G-6	ICCC	NA	Efftronics	INDIA
34	NA	EFF/WMM/0012	172.16.8.66	TLCMCGH01	ATCS Controller	CH-4 A	ICCC	NA	Efftronics	INDIA
35	NA	EFF/WMM/0013	172.16.8.67	TLCMCGH01	ATCS Controller	Akshardham	ICCC	NA	Efftronics	INDIA

43.3.2 ATCS Camera

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	8A02344PAJ19F65	172.16.13.71	ITC431-RW1F-IRL8	ATCS Camera	GEB Colony Crossroads WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
2	N/A	7D0BB18PAJ3011A	172.16.13.72	ITC431-RW1F-IRL8	ATCS Camera	GEB Colony Crossroads WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
3	N/A	8AO2344PAJ80ECF	172.16.13.73	ITC431-RW1F-IRL8	ATCS Camera	GEB Colony Crossroads WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
4	N/A	8A02344PAJ27545	172.16.13.74	ITC431-RW1F-IRL8	ATCS Camera	GEB Colony Crossroads WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
5	N/A	7D0BB18PAJA60CD	172.16.13.75	ITC431-RW1F-IRL8	ATCS Camera	Pethapur Crossroads WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
6	N/A	7D0BB18PAJD978B	172.16.13.76	ITC431-RW1F-IRL8	ATCS Camera	Pethapur Crossroads WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
7	N/A	8A02344PAJ1CB79	172.16.13.77	ITC431-RW1F-IRL8	ATCS Camera	Pethapur Crossroads WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
8	N/A	7D0BB18PAJE0030	172.16.13.78	ITC431-RW1F-IRL8	ATCS Camera	Pethapur Crossroads WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
9	N/A	8A02344PAJAC8EA	172.16.13.79	ITC431-RW1F-IRL8	ATCS Camera	Randeja Crossroad WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
10	N/A	8A02344PAJAFF45	172.16.13.80	ITC431-RW1F-IRL8	ATCS Camera	Randeja Crossroad WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
11	N/A	7D0BB18PJ6ED8A	172.16.13.81	ITC431-RW1F-IRL8	ATCS Camera	Randeja Crossroad WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
12	N/A	8A02344PAJ0E766	172.16.13.82	ITC431-RW1F-IRL8	ATCS Camera	Randeja Crossroad WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
13	N/A	7D0BB18PAJ987BF	172.16.13.83	ITC431-RW1F-IRL8	ATCS Camera	K-6 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
14	N/A	8A02344PAJ06C61	172.16.13.84	ITC431-RW1F-IRL8	ATCS Camera	K-6 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
15	N/A	8A02344PAJ63E7E	172.16.13.85	ITC431-RW1F-IRL8	ATCS Camera	K-6 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
16	N/A	8A02344PAJD956B	172.16.13.86	ITC431-RW1F-IRL8	ATCS Camera	K-6 WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
17	N/A	8A02344PAJE65F3	172.16.13.87	ITC431-RW1F-IRL8	ATCS Camera	K-5 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
18	N/A	8A02344PAJB7F0C	172.16.13.88	ITC431-RW1F-IRL8	ATCS Camera	K-5 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
19	N/A	8A02344PAJA4583	172.16.13.89	ITC431-RW1F-IRL8	ATCS Camera	K-5 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
20	N/A	8A02344PAJEE6C9	172.16.13.90	ITC431-RW1F-IRL8	ATCS Camera	K-5 WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
21	N/A	8A02344PAJ156ED	172.16.13.91	ITC431-RW1F-IRL8	ATCS Camera	Reliance Crossroad WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
22	N/A	7D0BB18PAJ537B0	172.16.13.92	ITC431-RW1F-IRL8	ATCS Camera	Reliance Crossroad WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
23	N/A	8A02344PAJBCB4A	172.16.13.93	ITC431-RW1F-IRL8	ATCS Camera	Reliance Crossroad WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
24	N/A	8A02344PAJ50CDD	172.16.13.94	ITC431-RW1F-IRL8	ATCS Camera	Reliance Crossroad WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
25	N/A	7D0BB18PAJA7625	172.16.13.95	ITC431-RW1F-IRL8	ATCS Camera	K-7 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
26	N/A	7D0BB18PAJ2E827	172.16.13.96	ITC431-RW1F-IRL8	ATCS Camera	K-7 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
27	N/A	7D0BB18PAJ36444	172.16.13.97	ITC431-RW1F-IRL8	ATCS Camera	K-7 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
28	N/A	8A02344PAJC5ABA	172.16.13.99	ITC431-RW1F-IRL8	ATCS Camera	KH-7 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
29	N/A	8A02344PAJBD6E6	172.16.13.100	ITC431-RW1F-IRL8	ATCS Camera	KH-7 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
30	N/A	7D0BB18PAJFDFEE	172.16.13.101	ITC431-RW1F-IRL8	ATCS Camera	KH-7 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
31	N/A	8A02344PAJ457A9	172.16.13.101	ITC431-RW1F-IRL8	ATCS Camera	KH-7 WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
32	N/A	8A02344PAJ55941	172.16.13.103	ITC431-RW1F-IRL8	ATCS Camera	Vasana Hadmathiya (KH-0.5) WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
33	N/A	8A02344PAJ0E051	172.16.13.104	ITC431-RW1F-IRL8	ATCS Camera	Vasana Hadmathiya (KH-0.5) WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
34	N/A	7D0BB18PAJ5121F	172.16.13.105	ITC431-RW1F-IRL8	ATCS Camera	Vasana Hadmathiya (KH-0.5) WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
35	N/A	8A02344PAJ32DBF	172.16.13.106	ITC431-RW1F-IRL8	ATCS Camera	Vasana Hadmathiya (KH-0.5) WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
36	N/A	7D0BB18PAJ5021D	172.16.13.107	ITC431-RW1F-IRL8	ATCS Camera	CHH-6 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
37	N/A	7D0BB18PAJ73990	172.16.13.108	ITC431-RW1F-IRL8	ATCS Camera	CHH-6 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
38	N/A	8A02344PAJ25424	172.16.13.109	ITC431-RW1F-IRL8	ATCS Camera	CHH-6 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
39	N/A	8A02344PAJF92CA	172.16.13.110	ITC431-RW1F-IRL8	ATCS Camera	CHH-6 WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
40	N/A	8A02344PAJAB94F	172.16.13.111	ITC431-RW1F-IRL8	ATCS Camera	CHH-4A WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
41	N/A	8A02344PAJF0C64	172.16.13.112	ITC431-RW1F-IRL8	ATCS Camera	CHH-4A WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
42	N/A	8A02344PAJF3D42	172.16.13.113	ITC431-RW1F-IRL8	ATCS Camera	CHH-4A WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
43	N/A	8A02344PAJ1944C	172.16.13.114	ITC431-RW1F-IRL8	ATCS Camera	CHH-4A WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
44	N/A	8A02344PAJ6A493	172.16.13.115	ITC431-RW1F-IRL8	ATCS Camera	KH-0 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
45	N/A	8A02344PAJ16710	172.16.13.116	ITC431-RW1F-IRL8	ATCS Camera	KH-0 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
46	N/A	7D0BB18PAJ956BB	172.16.13.117	ITC431-RW1F-IRL8	ATCS Camera	KH-0 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
47	N/A	7D0BB18PAJ16AD6	172.16.13.118	ITC431-RW1F-IRL8	ATCS Camera	KH-0 WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
48	N/A	8A02344PAJ3PB01	172.16.13.119	ITC431-RW1F-IRL8	ATCS Camera	GH-0 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
49	N/A	8A02344PAJC3F62	172.16.13.120	ITC431-RW1F-IRL8	ATCS Camera	GH-0 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
50	N/A	8A02344PAJ87640	172.16.13.121	ITC431-RW1F-IRL8	ATCS Camera	GH-0 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
51	N/A	7DB0BB18PAJ3999B	172.16.13.122	ITC431-RW1F-IRL8	ATCS Camera	GH-0 WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
52	N/A	8A02344PAJ4B4E9	172.16.13.123	ITC431-RW1F-IRL8	ATCS Camera	Sarita Udhyan (J-3) WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
53	N/A	8A02344PAJ9A1EG	172.16.13.124	ITC431-RW1F-IRL8	ATCS Camera	Sarita Udhyan (J-3) WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
54	N/A	8A02355PAJ3CCAD	172.16.13.125	ITC431-RW1F-IRL8	ATCS Camera	Sarita Udhyan (J-3) WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
55	N/A	8A02344PAJAC289	172.16.13.126	ITC431-RW1F-IRL8	ATCS Camera	Sarita Udhyan (J-3) WAY-4	ICCC	4.001.00AT001.0.R	Dahua	INDIA
56	N/A	8A02344PAJ26EF8	172.16.13.127	ITC431-RW1F-IRL8	ATCS Camera	CH-7 WAY-1	ICCC	4.001.00AT001.0.R	Dahua	INDIA
57	N/A	8A02344PAJB6647	172.16.13.128	ITC431-RW1F-IRL8	ATCS Camera	CH-7 WAY-2	ICCC	4.001.00AT001.0.R	Dahua	INDIA
58	N/A	8A02344PAJ81F6	172.16.13.129	ITC431-RW1F-IRL8	ATCS Camera	CH-7 WAY-3	ICCC	4.001.00AT001.0.R	Dahua	INDIA
59	NA	EFF/ATCS/VDC-0021	172.16.5.131	ITC231-RF1A-IR	ATCS Camera	GH-2 WAY 1(G2-GH2)	ICCC	2.622.0012000.0.R, build	Dahua	INDIA
60	NA	EFF/ATCS/VDC-0022	172.16.5.132	ITC231-RF1A-IR	ATCS Camera	GH-2 WAY 2(CH1-GH2)	ICCC	2.622.0012000.0.R, build	Dahua	INDIA
61	NA	EFF/ATCS/VDC-0023	172.16.5.133	ITC231-RF1A-IR	ATCS Camera	GH-2 WAY 3(CH2-GH2)	ICCC	2.622.0012000.0.R, build	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
62	NA	EFF/ATCS/VDC-0024	172.16.5.134	ITC231-RF1A-IR	ATCS Camera	GH-2 WAY 4 (GH3-GH2)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
63	NA	EFF/ATCS/VDC-0025	172.16.5.135	ITC231-RF1A-IR	ATCS Camera	GH-3 WAY 1(G3-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
64	NA	EFF/ATCS/VDC-0026	172.16.5.136	ITC231-RF1A-IR	ATCS Camera	GH-3 WAY 2(GH2-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
65	NA	EFF/ATCS/VDC-0027	172.16.5.137	ITC231-RF1A-IR	ATCS Camera	GH-3 WAY 3(CH3-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
66	NA	EFF/ATCS/VDC-0028	172.16.5.138	ITC231-RF1A-IR	ATCS Camera	GH-3 WAY 4(GH4-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
67	NA	EFF/ATCS/VDC-0037	172.16.5.139	ITC231-RF1A-IR	ATCS Camera	GH-7 WAY 1(G3-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
68	NA	EFF/ATCS/VDC-0038	172.16.5.140	ITC231-RF1A-IR	ATCS Camera	GH-7 WAY 2(GH2-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
69	NA	EFF/ATCS/VDC-0039	172.16.5.141	ITC231-RF1A-IR	ATCS Camera	GH-7 WAY 3(CH3-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
70	NA	EFF/ATCS/VDC-0040	172.16.5.142	ITC231-RF1A-IR	ATCS Camera	GH-7 WAY 4(GH4-GH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
71	NA	EFF/ATCS/VDC-0029	172.16.5.143	ITC231-RF1A-IR	ATCS Camera	GH-5 WAY 1(G5-GH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
72	NA	EFF/ATCS/VDC-0030	172.16.5.144	ITC231-RF1A-IR	ATCS Camera	GH-5 WAY 2(GH4-GH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
73	NA	EFF/ATCS/VDC-0031	172.16.5.145	ITC231-RF1A-IR	ATCS Camera	GH-5 WAY 3(CH5-GH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
74	NA	EFF/ATCS/VDC-0032	172.16.5.146	ITC231-RF1A-IR	ATCS Camera	GH-5 WAY 4(GH6-GH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
75	NA	EFF/ATCS/VDC-0033	172.16.5.147	ITC231-RF1A-IR	ATCS Camera	GH-6 WAY 1(G6-GH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
76	NA	EFF/ATCS/VDC-0034	172.16.5.148	ITC231-RF1A-IR	ATCS Camera	GH-6 WAY 2(GH5-GH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
77	NA	EFF/ATCS/VDC-0035	172.16.5.149	ITC231-RF1A-IR	ATCS Camera	GH-6 WAY 3(CH6-GH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
78	NA	EFF/ATCS/VDC-0036	172.16.5.150	ITC231-RF1A-IR	ATCS Camera	GH-6 WAY 4(GH7-GH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
79	NA	EFF/ATCS/VDC-0005	172.16.5.151	ITC231-RF1A-IR	ATCS Camera	CH-3 WAY 1(GH3-CH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
80	NA	EFF/ATCS/VDC-0006	172.16.5.152	ITC231-RF1A-IR	ATCS Camera	CH-3 WAY 2(CH2-CH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
81	NA	EFF/ATCS/VDC-0007	172.16.5.153	ITC231-RF1A-IR	ATCS Camera	CH-3 WAY 3(CHH3-CH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
82	NA	EFF/ATCS/VDC-0008	172.16.5.154	ITC231-RF1A-IR	ATCS Camera	CH-3 WAY 4(CH4-CH3)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
83	NA	EFF/ATCS/VDC-0009	172.16.5.159	ITC231-RF1A-IR	ATCS Camera	CH-4B WAY 1(CH3-CH4)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
84	NA	EFF/ATCS/VDC-0010	172.16.5.160	ITC231-RF1A-IR	ATCS Camera	CH-4B WAY 2(CHH4-CH4)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
85	NA	EFF/ATCS/VDC-0011	172.16.5.161	ITC231-RF1A-IR	ATCS Camera	CH-4B WAY 3(CH5-CH4)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
86	NA	EFF/ATCS/VDC-0013	172.16.5.162	ITC231-RF1A-IR	ATCS Camera	CH-5 WAY 1(GH5-CH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
87	NA	EFF/ATCS/VDC-0014	172.16.5.163	ITC231-RF1A-IR	ATCS Camera	CH-5 WAY 2(GH5-CH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
88	NA	EFF/ATCS/VDC-0015	172.16.5.164	ITC231-RF1A-IR	ATCS Camera	CH-5 WAY 3(CHH5-CH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
89	NA	EFF/ATCS/VDC-0016	172.16.5.165	ITC231-RF1A-IR	ATCS Camera	CH-5 WAY 4(CH6-CH5)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
90	NA	EFF/ATCS/VDC-0017	172.16.5.166	ITC231-RF1A-IR	ATCS Camera	CH-6 WAY 1(GH6-CH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
91	NA	EFF/ATCS/VDC-0018	172.16.5.167	ITC231-RF1A-IR	ATCS Camera	CH-6 WAY 2(CH5-CH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
92	NA	EFF/ATCS/VDC-0019	172.16.5.168	ITC231-RF1A-IR	ATCS Camera	CH-6 WAY 3(CHH6-CH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
93	NA	EFF/ATCS/VDC-0020	172.16.5.169	ITC231-RF1A-IR	ATCS Camera	CH-6 WAY 4(CH7-CH6)	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
94	NA	EFF/ATCS/VDC-0044	172.16.8.11	ITC231-RF1A-IR	ATCS Camera	KH-3 Way 1	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
95	NA	EFF/ATCS/VDC-0048	172.16.8.12	ITC231-RF1A-IR	ATCS Camera	KH-3 Way 2	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
96	NA	EFF/ATCS/VDC-0051	172.16.8.13	ITC231-RF1A-IR	ATCS Camera	KH-3 Way 3	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
97	NA	EFF/ATCS/VDC-0067	172.16.8.14	ITC231-RF1A-IR	ATCS Camera	KH-3 Way 4	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
98	NA	EFF/ATCS/VDC-0066	172.16.8.15	ITC231-RF1A-IR	ATCS Camera	KH-4A Way 1	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA
99	NA	EFF/ATCS/VDC-0069	172.16.8.16	ITC231-RF1A-IR	ATCS Camera	KH-4A Way 2	ICCC	2.622.00 12000.0. R, build	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
100	NA	EFF/ATCS/VDC-0071	172.16.8.17	ITC231-RF1A-IR	ATCS Camera	KH-4A Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
101	NA	EFF/ATCS/VDC-0068	172.16.8.18	ITC231-RF1A-IR	ATCS Camera	KH-4A Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
102	NA	EFF/ATCS/VDC-0060	172.16.8.19	ITC231-RF1A-IR	ATCS Camera	KH-4B Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
103	NA	EFF/ATCS/VDC-0065	172.16.8.20	ITC231-RF1A-IR	ATCS Camera	KH-4B Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
104	NA	EFF/ATCS/VDC-0062	172.16.8.21	ITC231-RF1A-IR	ATCS Camera	KH-4B Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
105	NA	EFF/ATCS/VDC-0064	172.16.8.22	ITC231-RF1A-IR	ATCS Camera	KH-4B Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
106	NA	EFF/ATCS/VDC-0072	172.16.8.23	ITC231-RF1A-IR	ATCS Camera	KH-5 Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
107	NA	EFF/ATCS/VDC-0073	172.16.8.24	ITC231-RF1A-IR	ATCS Camera	KH-5 Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
108	NA	EFF/ATCS/VDC-0075	172.16.8.25	ITC231-RF1A-IR	ATCS Camera	KH-5 Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
109	NA	EFF/ATCS/VDC-0076	172.16.8.26	ITC231-RF1A-IR	ATCS Camera	KH-5 Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
110	NA	EFF/ATCS/VDC-0078	172.16.8.27	ITC231-RF1A-IR	ATCS Camera	KH-6 Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
111	NA	EFF/ATCS/VDC-0053	172.16.8.28	ITC231-RF1A-IR	ATCS Camera	KH-6 Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
112	NA	EFF/ATCS/VDC-0049	172.16.8.29	ITC231-RF1A-IR	ATCS Camera	KH-6 Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
113	NA	EFF/ATCS/VDC-0052	172.16.8.30	ITC231-RF1A-IR	ATCS Camera	KH-6 Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
114	NA	EFF/ATCS/VDC-0056	172.16.8.31	ITC231-RF1A-IR	ATCS Camera	G-2 Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
115	NA	EFF/ATCS/VDC-0070	172.16.8.32	ITC231-RF1A-IR	ATCS Camera	G-2 Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
116	NA	EFF/ATCS/VDC-0077	172.16.8.33	ITC231-RF1A-IR	ATCS Camera	G-2 Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
117	NA	EFF/ATCS/VDC-0061	172.16.8.34	ITC231-RF1A-IR	ATCS Camera	G-2 Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
118	NA	EFF/ATCS/VDC-0055	172.16.8.35	ITC231-RF1A-IR	ATCS Camera	G-3 Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
119	NA	EFF/ATCS/VDC-0079	172.16.8.36	ITC231-RF1A-IR	ATCS Camera	G-3 Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
120	NA	EFF/ATCS/VDC-0059	172.16.8.37	ITC231-RF1A-IR	ATCS Camera	G-3 Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
121	NA	EFF/ATCS/VDC-0054	172.16.8.38	ITC231-RF1A-IR	ATCS Camera	G-3 Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
122	NA	EFF/ATCS/VDC-0063	172.16.8.39	ITC231-RF1A-IR	ATCS Camera	G-5 Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
123	NA	EFF/ATCS/VDC-0045	172.16.8.40	ITC231-RF1A-IR	ATCS Camera	G-5 Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
124	NA	EFF/ATCS/VDC-0058	172.16.8.41	ITC231-RF1A-IR	ATCS Camera	G-5 Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
125	NA	EFF/ATCS/VDC-0046	172.16.8.42	ITC231-RF1A-IR	ATCS Camera	G-5 Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
126	NA	EFF/ATCS/VDC-0083	172.16.8.43	ITC231-RF1A-IR	ATCS Camera	G-6 Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
127	NA	EFF/ATCS/VDC-0074	172.16.8.44	ITC231-RF1A-IR	ATCS Camera	G-6 Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
128	NA	EFF/ATCS/VDC-0081	172.16.8.45	ITC231-RF1A-IR	ATCS Camera	G-6 Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
129	NA	EFF/ATCS/VDC-0082	172.16.8.46	ITC231-RF1A-IR	ATCS Camera	G-6 Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
130	NA	EFF/ATCS/VDC-0057	172.16.8.47	ITC231-RF1A-IR	ATCS Camera	CH-4A Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
131	NA	EFF/ATCS/VDC-0080	172.16.8.48	ITC231-RF1A-IR	ATCS Camera	CH-4A Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
132	NA	EFF/ATCS/VDC-0001	172.16.8.49	ITC231-RF1A-IR	ATCS Camera	CH-4A Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
133	NA	EFF/ATCS/VDC-0043	172.16.8.51	ITC231-RF1A-IR	ATCS Camera	Akshardham Way 1	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
134	NA	EFF/ATCS/VDC-0042	172.16.8.52	ITC231-RF1A-IR	ATCS Camera	Akshardham Way 2	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
135	NA	EFF/ATCS/VDC-0050	172.16.8.53	ITC231-RF1A-IR	ATCS Camera	Akshardham Way 3	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA
136	NA	EFF/ATCS/VDC-0041	172.16.8.54	ITC231-RF1A-IR	ATCS Camera	Akshardham Way 4	ICCC	2.622.00 12000.0.R, build	Dahua	INDIA

43.3.3 LPUs

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	IPC-2021-060	172.16.13.141	ITMS-LPU	LPU	GEB Colony Crossroads	ICCC	20.04.2 LTS	Videonetics	INDIA
2	N/A	IPC-2021-046	172.16.13.142	ITMS-LPU	LPU	Pethapur Crossroads	ICCC	20.04.2 LTS	Videonetics	INDIA
3	N/A	IPC-2021-043	172.16.13.143	ITMS-LPU	LPU	Randeja Crossroad	ICCC	20.04.2 LTS	Videonetics	INDIA
4	N/A	IPC-2021-064	172.16.13.144	ITMS-LPU	LPU	K-6	ICCC	20.04.2 LTS	Videonetics	INDIA
5	N/A	IPC-2021-049	172.16.13.145	ITMS-LPU	LPU	K-5	ICCC	20.04.2 LTS	Videonetics	INDIA
6	N/A	IPC-2021-058	172.16.13.146	ITMS-LPU	LPU	Reliance Crossroad	ICCC	20.04.2 LTS	Videonetics	INDIA
7	N/A	IPC-2021-061	172.16.13.147	ITMS-LPU	LPU	K-7	ICCC	20.04.2 LTS	Videonetics	INDIA
8	N/A	IPC-2021-053	172.16.13.148	ITMS-LPU	LPU	KH-7	ICCC	20.04.2 LTS	Videonetics	INDIA
9	N/A	IPC-2021-065	172.16.13.149	ITMS-LPU	LPU	Vasana Hadmathiya (KH-0.5)	ICCC	20.04.2 LTS	Videonetics	INDIA
10	N/A	IPC-2021-062	172.16.13.150	ITMS-LPU	LPU	CHH-6	ICCC	20.04.2 LTS	Videonetics	INDIA
11	N/A	IPC-2021-051	172.16.13.151	ITMS-LPU	LPU	CHH-4A	ICCC	20.04.2 LTS	Videonetics	INDIA
12	N/A	IPC-2021-044	172.16.13.152	ITMS-LPU	LPU	KH-0	ICCC	20.04.2 LTS	Videonetics	INDIA
13	N/A	IPC-2021-056	172.16.13.153	ITMS-LPU	LPU	GH-0	ICCC	20.04.2 LTS	Videonetics	INDIA
14	N/A	IPC-2021-063	172.16.13.154	ITMS-LPU	LPU	Sarita Udhyan (J-3)	ICCC	20.04.2 LTS	Videonetics	INDIA
15	N/A	IPC-2021-054	172.16.13.155	ITMS-LPU	LPU	CH-7	ICCC	20.04.2 LTS	Videonetics	INDIA
16	N/A	IPC-2021-047	172.16.13.156	ITMS-LPU	LPU	G road (G2 to G3)	ICCC	20.04.2 LTS	Videonetics	INDIA
17	N/A	IPC-2021-050	172.16.13.157	ITMS-LPU	LPU	KH road (KH-1 to KH-2)	ICCC	20.04.2 LTS	Videonetics	INDIA
18	N/A	IPC-2021-045	172.16.13.158	ITMS-LPU	LPU	Uvarsad to Vavol Road	ICCC	20.04.2 LTS	Videonetics	INDIA
19	N/A	IPC-2021-067	172.16.13.159	ITMS-LPU	LPU	KH-0 to Reliance	ICCC	20.04.2 LTS	Videonetics	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
20	N/A	IPC-2021-055	172.16.13.160	ITMS-LPU	LPU	Gh-0 to Reliance Crossroad	ICCC	20.04.2 LTS	Videonetics	INDIA
21	N/A	IPC-2021-052	172.16.13.161	ITMS-LPU	LPU	J3 to J4	ICCC	20.04.2 LTS	Videonetics	INDIA
22	N/A	IPC-2021-057	172.16.13.162	ITMS-LPU	LPU	GH-7 to CH-7	ICCC	20.04.2 LTS	Videonetics	INDIA
23	N/A	IPC-2021-059	172.16.13.163	ITMS-LPU	LPU	CHH-4B to Jill Panchayat	ICCC	20.04.2 LTS	Videonetics	INDIA
24	NA	20190300020	172.16.7.101	SECURA-LP	LPU	GH-2 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
25	NA	20190300005	172.16.7.102	SECURA-LP	LPU	GH-2 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
26	NA	20190300009	172.16.7.103	SECURA-LP	LPU	GH-2 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
27	NA	20190300007	172.16.7.104	SECURA-LP	LPU	GH-2 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
28	NA	20190300021	172.16.7.105	SECURA-LP	LPU	GH-3 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
29	NA	20190300006	172.16.7.106	SECURA-LP	LPU	GH-3 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
30	NA	20190300003	172.16.7.107	SECURA-LP	LPU	GH-3 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
31	NA	20190300011	172.16.7.108	SECURA-LP	LPU	GH-3 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
32	NA	20190300023	172.16.7.109	SECURA-LP	LPU	GH-7	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
33	NA	20190300024	172.16.7.110	SECURA-LP	LPU	GH-7	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
34	NA	20190300025	172.16.7.111	SECURA-LP	LPU	GH-7	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
35	NA	20190300026	172.16.7.112	SECURA-LP	LPU	GH-7	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
36	NA	20190300015	172.16.7.113	SECURA-LP	LPU	CH-3 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
37	NA	20190300013	172.16.7.114	SECURA-LP	LPU	CH-3 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
38	NA	20190300016	172.16.7.115	SECURA-LP	LPU	CH-3 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
39	NA	20190300017	172.16.7.116	SECURA-LP	LPU	CH-3 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
40	NA	20190300018	172.16.7.117	SECURA-LP	LPU	CH-5 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
41	NA	20190300008	172.16.7.118	SECURA-LP	LPU	CH-5 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
42	NA	20190300014	172.16.7.119	SECURA-LP	LPU	CH-5 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
43	NA	20190300012	172.16.7.120	SECURA-LP	LPU	CH-5 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
44	NA	20190300010	172.16.7.121	SECURA-LP	LPU	Between GH2 & GH3 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
45	NA	20190300004	172.16.7.122	SLPU7C-I7	LPU	Between GH2 & GH3 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
46	NA	20190300025	172.16.7.123	SLPU7C-I7	LPU	Between GH3 & GH4 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
47	NA	20190300028	172.16.7.124	SLPU7C-I7	LPU	Between GH3 & GH4 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
48	NA	20190300029	172.16.7.125	SLPU7C-I7	LPU	Between GH5 & GH6	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
49	NA	20190300030	172.16.7.126	SLPU7C-I7	LPU	Between GH5 & GH6	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
50	NA	20190300031	172.16.7.129	SLPU7C-I7	LPU	Between CH5 & CH6	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
51	NA	20190300032	172.16.7.130	SLPU7C-I7	LPU	Between CH5 & CH6	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
52	NA	20190700061	172.16.8.205	SLPU7C-I7	LPU	KH-3 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
53	NA	20190700068	172.16.8.206	SLPU7C-I7	LPU	KH-3 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
54	NA	20190700057	172.16.8.207	SLPU7C-I7	LPU	KH-3 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
55	NA	20190700056	172.16.8.208	SLPU7C-I7	LPU	KH-3 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
56	NA	20190700073	172.16.8.209	SLPU7C-I7	LPU	KH-4A P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
57	NA	20190700066	172.16.8.210	SLPU7C-I7	LPU	KH-4A P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
58	NA	20190700074	172.16.8.211	SLPU7C-I7	LPU	KH-4A P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
59	NA	20190700075	172.16.8.212	SLPU7C-I7	LPU	KH-4A P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
60	NA	20190700058	172.16.8.213	SLPU7C-I7	LPU	KH-4B P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
61	NA	20190700059	172.16.8.214	SLPU7C-I7	LPU	KH-4B P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
62	NA	20190700062	172.16.8.215	SLPU7C-I7	LPU	KH-4B P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
63	NA	20190700063	172.16.8.216	SLPU7C-I7	LPU	KH-4B P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
64	NA	20190700054	172.16.8.217	SLPU7C-I7	LPU	KH-5 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
65	NA	20190700052	172.16.8.218	SLPU7C-I7	LPU	KH-5 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
66	NA	20190700055	172.16.8.219	SLPU7C-I7	LPU	KH-5 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
67	NA	20190700053	172.16.8.220	SLPU7C-I7	LPU	KH-5 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
68	NA	20190700051	172.16.8.221	SLPU7C-I7	LPU	KH-6 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
69	NA	20190700050	172.16.8.222	SLPU7C-I7	LPU	KH-6 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
70	NA	220190700049	172.16.8.223	SLPU7C-I7	LPU	KH-6 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
71	NA	20190700069	172.16.8.224	SLPU7C-I7	LPU	KH-6 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
72	NA	20190700048	172.16.8.225	SLPU7C-I7	LPU	G-2 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
73	NA	20190700070	172.16.8.226	SLPU7C-I7	LPU	G-2 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
74	NA	20190700071	172.16.8.227	SLPU7C-I7	LPU	G-2 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
75	NA	20190700072	172.16.8.228	SLPU7C-I7	LPU	G-2 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
76	NA	20190700061	172.16.8.229	SLPU7C-I7	LPU	G-3 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
77	NA	20190700060	172.16.8.230	SLPU7C-I7	LPU	G-3 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
78	NA	20190700064	172.16.8.231	SLPU7C-I7	LPU	G-3 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
79	NA	2019300001	172.16.8.232	SLPU7C-I7	LPU	G-3 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
80	NA	20190700042	172.16.8.233	SLPU7C-I7	LPU	G-5 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
81	NA	20190700046	172.16.8.234	SLPU7C-I7	LPU	G-5 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
82	NA	20190700047	172.16.8.235	SLPU7C-I7	LPU	G-5 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
83	NA	20190700040	172.16.8.236	SLPU7C-I7	LPU	G-5 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
84	NA	20190700035	172.16.8.237	SLPU7C-I7	LPU	G-6 P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
85	NA	20190700037	172.16.8.238	SLPU7C-I7	LPU	G-6 P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
86	NA	20190700034	172.16.8.239	SLPU7C-I7	LPU	G-6 P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
87	NA	20190700038	172.16.8.240	SLPU7C-I7	LPU	G-6 P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
88	NA	20190700036	172.16.8.241	SLPU7C-I7	LPU	CH-4A P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
89	NA	20190700033	172.16.8.242	SLPU7C-I7	LPU	CH-4A P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
90	NA	20190700041	172.16.8.243	SLPU7C-I7	LPU	CH-4A P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
91	NA	20190700044	172.16.8.244	SLPU7C-I7	LPU	Akhsardham P1	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
92	NA	20190700045	172.16.8.245	SLPU7C-I7	LPU	Akhsardham P2	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
93	NA	20190700039	172.16.8.246	SLPU7C-I7	LPU	Akhsardham P3	ICCC	18.04.2 LTS	Lookman-Secura	INDIA
94	NA	20190700043	172.16.8.247	SLPU7C-I7	LPU	Akhsardham P4	ICCC	18.04.2 LTS	Lookman-Secura	INDIA

43.3.4 Network Video Recorder

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	DS-7608NI-I20820211130CCRRJ14794658WCVU	172.16.13.171	DS-7608NI-I2	NVR	GEB Colony Crossroads	ICCC	V4.51.025 build 210927	Hikvision	INDIA
2	N/A	DS-7608NI-I20820211202CCRRJ17726621WCVU	172.16.13.172	DS-7608NI-I2	NVR	GEB Colony Crossroads	ICCC	V4.51.025 build 210927	Hikvision	INDIA
3	N/A	DS-7608NI-I20820211019CCRRG91784894WCVU	172.16.13.173	DS-7608NI-I2	NVR	Pethapur Crossroads	ICCC	V4.51.025 build 210927	Hikvision	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
4	N/A	DS-7608NI-I20820211019CCRRG91784885WCVU	172.16.13.174	DS-7608NI-I2	NVR	Pethapur Crossroads	ICCC	V4.51.025 build 210927	Hikvision	INDIA
5	N/A	DS-7608NI-I20820211130CCRRJ17114578WCVU	172.16.13.175	DS-7608NI-I2	NVR	Randeja Crossroad	ICCC	V4.51.025 build 210927	Hikvision	INDIA
6	N/A	DS-7608NI-I20820211130CCRRJ17114575WCVU	172.16.13.176	DS-7608NI-I2	NVR	Randeja Crossroad	ICCC	V4.51.025 build 210927	Hikvision	INDIA
7	N/A	DS-7608NI-I20820211130CCRRJ17114576WCVU	172.16.13.177	DS-7608NI-I2	NVR	K-6	ICCC	V4.51.025 build 210927	Hikvision	INDIA
8	N/A	DS-7608NI-I20820211130CCRRJ17114574WCVU	172.16.13.178	DS-7608NI-I2	NVR	K-6	ICCC	V4.51.025 build 210927	Hikvision	INDIA
9	N/A	DS-7608NI-I20820211130CCRRJ17114577WCVU	172.16.13.179	DS-7608NI-I2	NVR	K-5	ICCC	V4.51.025 build 210927	Hikvision	INDIA
10	N/A	DS-7608NI-I20820211019CCRRG91784890WCVU	172.16.13.180	DS-7608NI-I2	NVR	K-5	ICCC	V4.51.025 build 210927	Hikvision	INDIA
11	N/A	DS-7608NI-I20820211019CCRRG91784892WCVU	172.16.13.181	DS-7608NI-I2	NVR	Reliance Crossroad	ICCC	V4.51.025 build 210927	Hikvision	INDIA
12	N/A	DS-7608NI-I20820211019CCRRG91784893WCVU	172.16.13.182	DS-7608NI-I2	NVR	Reliance Crossroad	ICCC	V4.51.025 build 210927	Hikvision	INDIA
13	N/A	DS-7608NI-I20820211019CCRRG91784886WCVU	172.16.13.183	DS-7608NI-I2	NVR	K-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
14	N/A	DS-7608NI-I20820211019CCRRG91784889WCVU	172.16.13.184	DS-7608NI-I2	NVR	K-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
15	N/A	DS-7608NI-I20820211202CCRRJ17726594WCVU	172.16.13.185	DS-7608NI-I2	NVR	KH-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
16	N/A	DS-7608NI-I20820211019CCRRG91784888WCVU	172.16.13.186	DS-7608NI-I2	NVR	KH-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
17	N/A	DS-7608NI-I20820211202CCRRJ17726623WCVU	172.16.13.187	DS-7608NI-I2	NVR	Vasana Hadmathiya (KH-0.5)	ICCC	V4.51.025 build 210927	Hikvision	INDIA
18	N/A	DS-7608NI-I20820211202CCR	172.16.13.188	DS-7608NI-I2	NVR	Vasana Hadmathiya (KH-0.5)	ICCC	V4.51.025 build 210927	Hikvision	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		RJ17726589WCVU								
19	N/A	DS-7608NI-I20820211130CCRRJ17114573WCVU	172.16.13.189	DS-7608NI-I2	NVR	CHH-6	ICCC	V4.51.025 build 210927	Hikvision	INDIA
20	N/A	DS-7608NI-I20820211019CCRRG91784891WCVU	172.16.13.190	DS-7608NI-I2	NVR	CHH-6	ICCC	V4.51.025 build 210927	Hikvision	INDIA
21	N/A	DS-7608NI-I20820211019CCRRG91784887WCVU	172.16.13.191	DS-7608NI-I2	NVR	CHH-4A	ICCC	V4.51.025 build 210927	Hikvision	INDIA
22	N/A	DS-7608NI-I20820211202CCRRJ17726600WCVU	172.16.13.192	DS-7608NI-I2	NVR	CHH-4A	ICCC	V4.51.025 build 210927	Hikvision	INDIA
23	N/A	DS-7608NI-I20820211202CCRRJ17726602WCVU	172.16.13.193	DS-7608NI-I2	NVR	KH-0	ICCC	V4.51.025 build 210927	Hikvision	INDIA
24	N/A	DS-7608NI-I20820211130CCRRJ14794657WCVU	172.16.13.194	DS-7608NI-I2	NVR	KH-0	ICCC	V4.51.025 build 210927	Hikvision	INDIA
25	N/A	DS-7608NI-I20820211130CCRRJ14794654WCVU	172.16.13.195	DS-7608NI-I2	NVR	GH-0	ICCC	V4.51.025 build 210927	Hikvision	INDIA
26	N/A	DS-7608NI-I20820211202CCRRJ17726588WCVU	172.16.13.196	DS-7608NI-I2	NVR	GH-0	ICCC	V4.51.025 build 210927	Hikvision	INDIA
27	N/A	DS-7608NI-I20820211202CCRRJ17726606WCVU	172.16.13.197	DS-7608NI-I2	NVR	Sarita Udhyan (J-3)	ICCC	V4.51.025 build 210927	Hikvision	INDIA
28	N/A	DS-7608NI-I20820211202CCRRJ17726598WCVU	172.16.13.198	DS-7608NI-I2	NVR	Sarita Udhyan (J-3)	ICCC	V4.51.025 build 210927	Hikvision	INDIA
29	N/A	DS-7608NI-I20820211130CCRRJ14794659WCVU	172.16.13.199	DS-7608NI-I2	NVR	CH-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
30	N/A	DS-7608NI-I20820211202CCRRJ17726619WCVU	172.16.13.200	DS-7608NI-I2	NVR	CH-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
31	N/A	DS-7608NI-I20820211202CCRRJ17726590WCVU	172.16.13.201	DS-7608NI-I2	NVR	G road (G2 to G3)	ICCC	V4.51.025 build 210927	Hikvision	INDIA
32	N/A	DS-7608NI-I20820211202CCRRJ17726604WCVU	172.16.13.202	DS-7608NI-I2	NVR	G road (G2 to G3)	ICCC	V4.51.025 build 210927	Hikvision	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
33	N/A	DS-7608NI-I20820211202CCRRJ17726620WCVU	172.16.13.203	DS-7608NI-I2	NVR	Uvarsad to Vavol Road	ICCC	V4.51.025 build 210927	Hikvision	INDIA
34	N/A	DS-7608NI-I20820211202CCRRJ17726610WCVU	172.16.13.204	DS-7608NI-I2	NVR	KH-0 to Reliance	ICCC	V4.51.025 build 210927	Hikvision	INDIA
35	N/A	DS-7608NI-I20820211202CCRRJ17726625WCVU	172.16.13.205	DS-7608NI-I2	NVR	Gh-0 to Reliance Crossroad	ICCC	V4.51.025 build 210927	Hikvision	INDIA
36	N/A	DS-7608NI-I20820211202CCRRJ17726608WCVU	172.16.13.206	DS-7608NI-I2	NVR	J3 to J4	ICCC	V4.51.025 build 210927	Hikvision	INDIA
37	N/A	DS-7608NI-I20820211202CCRRJ17726595WCVU	172.16.13.207	DS-7608NI-I2	NVR	GH-7 to CH-7	ICCC	V4.51.025 build 210927	Hikvision	INDIA
38	N/A	DS-7608NI-I20820211202CCRRJ17726601WCVU	172.16.13.208	DS-7608NI-I2	NVR	CHH-4B to Jill Panchayat	ICCC	V4.51.025 build 210927	Hikvision	INDIA
39	N/A	210235T9T3F18B000175	172.16.7.133	SNVR-E0216	NVR	GH-3	ICCC	B3202P41C12210	Secura	INDIA
40	N/A	210235T9T3F18B000176	172.16.7.134	SNVR-E0216	NVR	GH-2	ICCC	B3202P41C12210	Secura	INDIA
41	N/A	210235T9T3F18B000092	172.16.7.135	SNVR-E0216	NVR	GH-7	ICCC	B3202P41C12210	Secura	INDIA
42	N/A	210235T9T1318B000231	172.16.7.137	SNVR-E0216	NVR	Between GH-3 & GH- 4	ICCC	B3202P41C12210	Secura	INDIA
43	N/A	210235T9T1318B000302	172.16.7.138	SNVR-E0216	NVR	Between GH-5 & GH-6	ICCC	B3202P41C12210	Secura	INDIA
44	N/A	210235T9T1318B000230	172.16.7.139	SNVR-E0216	NVR	Between GH-2 & GH-3	ICCC	B3202P41C12210	Secura	INDIA
45	N/A	210235T9T1318B000320	172.16.7.140	SNVR-E0216	NVR	Between CH-5 & CH- 6	ICCC	B3202P41C12210	Secura	INDIA
46	NA	210235T9T3F18B000006	172.16.9.11	SNVR-E0216	NVR	KH-3	ICCC	B3202P41C12210	Secura	INDIA
47	NA	210235T9T3F18B000043	172.16.9.12	SNVR-E0216	NVR	KH-4 A	ICCC	B3202P41C12210	Secura	INDIA
48	NA	210235T9T3F18B000100	172.16.9.13	SNVR-E0216	NVR	KH-4 B	ICCC	B3202P41C12210	Secura	INDIA
49	NA	210235T9T3F18B000007	172.16.9.14	SNVR-E0216	NVR	KH-5	ICCC	B3202P41C12210	Secura	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
50	NA	NA	172.16.9.15	SNVR-E0216	NVR	KH-6	ICCC	B3202P41C12210	Secura	INDIA
51	NA	210235T9T3F18B000191	172.16.9.16	SNVR-E0216	NVR	G-2	ICCC	B3202P41C12210	Secura	INDIA
52	NA	210235T9T3F191000147	172.16.9.17	SNVR-E0216	NVR	G-3	ICCC	B3202P41C12210	Secura	INDIA
53	NA	NA	172.16.9.18	SNVR-E0216	NVR	G-5	ICCC	B3202P41C12210	Secura	INDIA
54	NA	210235T9T3F191000144	172.16.9.19	SNVR-E0216	NVR	G-6	ICCC	B3202P41C12210	Secura	INDIA
55	NA	210235T9T3F18B000001	172.16.9.20	SNVR-E0216	NVR	CH-4 A	ICCC	B3202P41C12210	Secura	INDIA
56	NA	210235T9T3F18B000187	172.16.9.21	SNVR-E0216	NVR	Akshardham	ICCC	B3202P41C12210	Secura	INDIA

43.3.5 Public Address System

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	21485667	172.16.13.211	ELSII-10HM	PA	GEB Colony Crossroads	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
2	N/A	21485613	172.16.13.212	ELSII-10HM	PA	GEB Colony Crossroads	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
3	N/A	21485444	172.16.13.213	ELSII-10HM	PA	Pethapur Crossroads	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
4	N/A	19034493	172.16.13.214	ELSII-10HM	PA	Pethapur Crossroads	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
5	N/A	21485693	172.16.13.215	ELSII-10HM	PA	Randeja Crossroad	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
6	N/A	21485693	172.16.13.216	ELSII-10HM	PA	Randeja Crossroad	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
7	N/A	21485590	172.16.13.217	ELSII-10HM	PA	Reliance Crossroad	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
8	N/A	21485611	172.16.13.218	ELSII-10HM	PA	Reliance Crossroad	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
9	N/A	21485604	172.16.13.219	ELSII-10HM	PA	KH-7	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
10	N/A	21485601	172.16.13.220	ELSII-10HM	PA	KH-7	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
11	N/A	21485688	172.16.13.221	ELSII-10HM	PA	Vasana Hadmathiya (KH-0.5)	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
12	N/A	18280661	172.16.13.222	ELSII-10HM	PA	Vasana Hadmathiya (KH-0.5)	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
13	N/A	21485697	172.16.13.223	ELSII-10HM	PA	CHH-6	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
14	N/A	21485466	172.16.13.224	ELSII-10HM	PA	CHH-6	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA

Sr No	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
15	N/A	21485588	172.16.13.225	ELSII-10HM	PA	CHH-4A	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
16	N/A	21485572	172.16.13.226	ELSII-10HM	PA	CHH-4A	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
17	N/A	21485686	172.16.13.227	ELSII-10HM	PA	GH-0	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
18	N/A	21485696	172.16.13.228	ELSII-10HM	PA	GH-0	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
19	N/A	21485821	172.16.13.229	ELSII-10HM	PA	Sarita Udhyan (J-3)	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
20	N/A	21485689	172.16.13.230	ELSII-10HM	PA	Sarita Udhyan (J-3)	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
21	N/A	21485600	172.16.13.231	ELSII-10HM	PA	CH-7	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
22	N/A	21485602	172.16.13.232	ELSII-10HM	PA	CH-7	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
23	NA	18443463	172.16.6.254	ENA2100-AC	PA	G-2	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
24	NA	18443517	172.16.6.253	ENA2100-AC	PA	KH-1	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
25	NA	18443584	172.16.6.252	ENA2100-AC	PA	KH-2	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
26	NA	18443270	172.16.7.225	ENA2100-AC	PA	KH-3	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
27	NA	18443457	172.16.6.251	ENA2100-AC	PA	KH-6	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
28	NA	19021805	172.16.7.226	ENA2100-AC	PA	KH-5	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
29	NA	18443590	172.16.7.227	ENA2100-AC	PA	G-1	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
30	NA	18443524	172.16.7.228	ENA2100-AC	PA	G-3	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
31	NA	18443560	172.16.7.229	ENA2100-AC	PA	G-5	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
32	NA	18443585	172.16.7.230	ENA2100-AC	PA	G-6	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
33	NA	18443586	172.16.7.231	ENA2100-AC	PA	KH-4A	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
34	NA	18443583	172.16.7.232	ENA2100-AC	PA	KH-4B	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA
35	NA	18443270	172.16.7.233	ENA2100-AC	PA	CH-4A	ICCC	7.4.3.0 (vsft)	Zenitel	INDIA

43.3.6 Emergency Call Box

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	21498057	172.16.13.235	TCIS-1/TCIS-2/TCIS-3	ECB	GEB Colony Crossroads	ICCC	6.4.3.1 (vsft)	Zenitel	INDIA
2	N/A	21498060	172.16.13.236	TCIS-1/TCIS-2/TCIS-3	ECB	Pethapur Crossroads	ICCC	6.4.3.1 (vsft)	Zenitel	INDIA
3	N/A	21498610	172.16.13.237	TCIS-1/TCIS-2/TCIS-3	ECB	Randeja Crossroad	ICCC	6.4.3.1 (vsft)	Zenitel	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
4	N/A	21498160	172.16.13.238	TCIS-1/TCIS-2/TCIS-3	ECB	KH-7	ICCC	6.4.3.1 (vsft)	Zenitel	INDIA
5	N/A	21498614	172.16.13.239	TCIS-1/TCIS-2/TCIS-3	ECB	Vasana Hadmathiya (KH-0.5)	ICCC	6.4.3.1 (vsft)	Zenitel	INDIA
6	NA	18407142	172.16.6.42	TCIS-4	ECB	Ch-3.1	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
7	NA	18407388	172.16.6.43	TCIS-4	ECB	Ch-3.2	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
8	NA	19035064	172.16.6.44	TCIS-4	ECB	Ch-4 B	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
9	NA	18407139	172.16.6.45	TCIS-4	ECB	Ch-5	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
10	NA	18407128	172.16.6.46	TCIS-4	ECB	Gh-2	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
11	NA	18407142	172.16.6.47	TCIS-4	ECB	Gh-3	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
12	NA	18407129	172.16.6.48	TCIS-4	ECB	GH-5.1	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
13	NA	18407140	172.16.6.49	TCIS-4	ECB	Gh-5.2	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
14	NA	18407141	172.16.6.50	TCIS-4	ECB	GH-6	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
15	NA	19075835	172.16.6.38	TCIS-4	ECB	KH-4A	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
16	NA	19035064	172.16.6.39	TCIS-4	ECB	KH-4B	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA
17	NA	19034114	172.16.6.40	TCIS-4	ECB	CH-4A	ICCC	4.11.3.0 (vsft)	Zenitel	INDIA

43.3.7 RLVD Camera

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073364	172.16.14.31	DS-2CD4B25G0-IZS	RLVD-1	GEB Colony Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
2	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463466	172.16.14.32	DS-2CD4B25G0-IZS	RLVD-2	GEB Colony Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
3	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463503	172.16.14.33	DS-2CD4B25G0-IZS	RLVD-3	GEB Colony Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
4	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073537	172.16.14.34	DS-2CD4B25G0-IZS	RLVD-4	GEB Colony Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
5	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463480	172.16.14.43	DS-2CD4B25G0-IZS	RLVD-1	Pethapur Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
6	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463494	172.16.14.44	DS-2CD4B25G0-IZS	RLVD-2	Pethapur Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
7	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463499	172.16.14.45	DS-2CD4B25G0-IZS	RLVD-3	Pethapur Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
8	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463451	172.16.14.46	DS-2CD4B25G0-IZS	RLVD-4	Pethapur Crossroads	ICCC	V5.7.72 build 211014	Hikvision	INDIA
9	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073419	172.16.14.55	DS-2CD4B25G0-IZS	RLVD-1	Randeja Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
10	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073444	172.16.14.56	DS-2CD4B25G0-IZS	RLVD-2	Randeja Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
11	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463492	172.16.14.57	DS-2CD4B25G0-IZS	RLVD-3	Randeja Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
12	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073346	172.16.14.58	DS-2CD4B25G0-IZS	RLVD-4	Randeja Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
13	N/A	DS-2CD4B25G0-IZS20211229AAWRJ31463477	172.16.14.67	DS-2CD4B25G0-IZS	RLVD-1	K-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
14	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463474	172.16.14.68	DS-2CD4B25G0-IZS	RLVD-2	K-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
15	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463488	172.16.14.69	DS-2CD4B25G0-IZS	RLVD-3	K-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
16	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073429	172.16.14.70	DS-2CD4B25G0-IZS	RLVD-4	K-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
17	N/A	DS-2CD4C36FWD-AP20220107AAWRJ31463455	172.16.14.79	DS-2CD4B25G0-IZS	RLVD-1	K-5	ICCC	V5.7.72 build 211014	Hikvision	INDIA
18	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463453	172.16.14.80	DS-2CD4B25G0-IZS	RLVD-2	K-5	ICCC	V5.7.72 build 211014	Hikvision	INDIA
19	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463450	172.16.14.81	DS-2CD4B25G0-IZS	RLVD-3	K-5	ICCC	V5.7.72 build 211014	Hikvision	INDIA
20	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073504	172.16.14.82	DS-2CD4B25G0-IZS	RLVD-4	K-5	ICCC	V5.7.72 build 211014	Hikvision	INDIA
21	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463454	172.16.14.91	DS-2CD4B25G0-IZS	RLVD-1	Reliance Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
22	N/A	DS-2CD4C36FWD-AP20220107AAWRJ31463465	172.16.14.92	DS-2CD4B25G0-IZS	RLVD-2	Reliance Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
23	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463476	172.16.14.93	DS-2CD4B25G0-IZS	RLVD-3	Reliance Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
24	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463471	172.16.14.94	DS-2CD4B25G0-IZS	RLVD-4	Reliance Crossroad	ICCC	V5.7.72 build 211014	Hikvision	INDIA
25	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463493	172.16.14.103	DS-2CD4B25G0-IZS	RLVD-1	K-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
26	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463490	172.16.14.104	DS-2CD4B25G0-IZS	RLVD-2	K-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
27	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463458	172.16.14.105	DS-2CD4B25G0-IZS	RLVD-3	K-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
28	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463468	172.16.14.115	DS-2CD4B25G0-IZS	RLVD-1	KH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
29	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463463	172.16.14.116	DS-2CD4B25G0-IZS	RLVD-2	KH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
30	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463497	172.16.14.117	DS-2CD4B25G0-IZS	RLVD-3	KH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
31	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463501	172.16.14.118	DS-2CD4B25G0-IZS	RLVD-4	KH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
32	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073399	172.16.14.127	DS-2CD4B25G0-IZS	RLVD-1	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
33	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463486	172.16.14.128	DS-2CD4B25G0-IZS	RLVD-2	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
34	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463444	172.16.14.129	DS-2CD4B25G0-IZS	RLVD-3	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
35	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463482	172.16.14.130	DS-2CD4B25G0-IZS	RLVD-4	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
36	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463500	172.16.14.139	DS-2CD4B25G0-IZS	RLVD-1	CHH-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
37	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463489	172.16.14.140	DS-2CD4B25G0-IZS	RLVD-2	CHH-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
38	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463447	172.16.14.141	DS-2CD4B25G0-IZS	RLVD-3	CHH-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
39	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463478	172.16.14.142	DS-2CD4B25G0-IZS	RLVD-4	CHH-6	ICCC	V5.7.72 build 211014	Hikvision	INDIA
40	N/A	DS-2CD4C36FWD-AP20220107AAWRJ31463487	172.16.14.151	DS-2CD4B25G0-IZS	RLVD-1	CHH-4A	ICCC	V5.7.72 build 211014	Hikvision	INDIA
41	N/A	DS-2CD4C36FWD-AP20220107AAWRJ31463459	172.16.14.152	DS-2CD4B25G0-IZS	RLVD-2	CHH-4A	ICCC	V5.7.72 build 211014	Hikvision	INDIA
42	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463464	172.16.14.153	DS-2CD4B25G0-IZS	RLVD-3	CHH-4A	ICCC	V5.7.72 build 211014	Hikvision	INDIA
43	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073313	172.16.14.154	DS-2CD4B25G0-IZS	RLVD-4	CHH-4A	ICCC	V5.7.72 build 211014	Hikvision	INDIA
44	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463445	172.16.14.163	DS-2CD4B25G0-IZS	RLVD-1	KH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA
45	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463467	172.16.14.164	DS-2CD4B25G0-IZS	RLVD-2	KH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
46	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463448	172.16.14.165	DS-2CD4B25G0-IZS	RLVD-3	KH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA
47	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463502	172.16.14.166	DS-2CD4B25G0-IZS	RLVD-4	KH-0	ICCC	7.2.1.611 Oct 8 2019	Hikvision	INDIA
48	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463479	172.16.14.175	DS-2CD4B25G0-IZS	RLVD-1	GH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA
49	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463460	172.16.14.176	DS-2CD4B25G0-IZS	RLVD-2	GH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA
50	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463496	172.16.14.177	DS-2CD4B25G0-IZS	RLVD-3	GH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA
51	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463472	172.16.14.178	DS-2CD4B25G0-IZS	RLVD-4	GH-0	ICCC	V5.7.72 build 211014	Hikvision	INDIA
52	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463495	172.16.14.187	DS-2CD4B25G0-IZS	RLVD-1	Sarita Udhyan (J-3)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
53	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463462	172.16.14.188	DS-2CD4B25G0-IZS	RLVD-2	Sarita Udhyan (J-3)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
54	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463481	172.16.14.189	DS-2CD4B25G0-IZS	RLVD-3	Sarita Udhyan (J-3)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
55	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463473	172.16.14.190	DS-2CD4B25G0-IZS	RLVD-4	Sarita Udhyan (J-3)	ICCC	V5.7.72 build 211014	Hikvision	INDIA
56	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463461	172.16.14.199	DS-2CD4B25G0-IZS	RLVD-1	CH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
57	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463457	172.16.14.200	DS-2CD4B25G0-IZS	RLVD-2	CH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
58	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463483	172.16.14.201	DS-2CD4B25G0-IZS	RLVD-3	CH-7	ICCC	V5.7.72 build 211014	Hikvision	INDIA
59	NA	0180JA0J03	172.16.5.59	SIP-20EH5W-BO4	RLVD Camera	CH-3 P1 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
60	NA	0180JA0HZ3	172.16.5.60	SIP-20EH5W-BO4	RLVD Camera	CH-3 P2 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
61	NA	0180JA0J01	172.16.5.61	SIP-20EH5W-BO4	RLVD Camera	CH-3 P3 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
62	NA	0180JA0HZ5	172.16.5.62	SIP-20EH5W-BO4	RLVD Camera	CH-3 P4 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
63	NA	0180JA0J0T	172.16.5.71	SIP-20EH5W-BO4	RLVD Camera	GH-3 P1 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
64	NA	0180JA0J0N	172.16.5.72	SIP-20EH5W-BO4	RLVD Camera	GH-3 P2 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
65	NA	0180JA0J11	172.16.5.73	SIP-20EH5W-BO4	RLVD Camera	GH-3 P3 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
66	NA	0180JA0J0V	172.16.5.74	SIP-20EH5W-BO4	RLVD Camera	GH-3 P4 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
67	NA	0180JA0J0W	172.16.5.83	SIP-20EH5W-BO4	RLVD Camera	CH-5 P1 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
68	NA	0180JA0HZN	172.16.5.84	SIP-20EH5W-BO4	RLVD Camera	CH-5 P2 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
69	NA	0180JA0J1D	172.16.5.85	SIP-20EH5W-BO4	RLVD Camera	CH-5 P3 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
70	NA	0180JA0HZM	172.16.5.86	SIP-20EH5W-BO4	RLVD Camera	CH-5 P4 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
71	NA	0180JA0J10	172.16.5.95	SIP-20EH5W-BO4	RLVD Camera	GH-2 P1 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
72	NA	0180JA0J13	172.16.5.96	SIP-20EH5W-BO4	RLVD Camera	GH-2 P2 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
73	NA	01941A0QBB	172.16.5.97	SIP-20EH5W-BO4	RLVD Camera	GH-2 P3 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
74	NA	0180JA0J00	172.16.5.98	SIP-20EH5W-BO4	RLVD Camera	GH-2 P4 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
75	NA	0171FA02N0	172.16.5.107	SIP-20EH5W-BO4	RLVD Camera	GH-7 P1 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
76	NA	0180JA0HZ9	172.16.5.108	SIP-20EH5W-BO4	RLVD Camera	GH-7 P2 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
77	NA	0180JA0J0Z	172.16.5.109	SIP-20EH5W-BO4	RLVD Camera	GH-7 P3 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
78	NA	0180JA0J0J	172.16.5.110	SIP-20EH5W-BO4	RLVD Camera	GH-7 P4 RLVD	ICCC	7.2.1.611 Oct	Secura	INDIA
79	NA	01941A0QA7	172.16.8.79	SIP-20EH5W-BO4	RLVD Camera	KH-3 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
80	NA	01941A0QBM	172.16.8.80	SIP-20EH5W-BO4	RLVD Camera	KH-3 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
81	NA	01941A0QBK	172.16.8.81	SIP-20EH5W-BO4	RLVD Camera	KH-3 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
82	NA	01941A0QAF	172.16.8.82	SIP-20EH5W-BO4	RLVD Camera	KH-3 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
83	NA	01941A0QCH	172.16.8.91	SIP-20EH5W-BO4	RLVD Camera	KH-4A P1 RLVD	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
84	NA	01941A0QB9	172.16.8.92	SIP-20EH5W-BO4	RLVD Camera	KH-4A P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
85	NA	01941A0QB6	172.16.8.93	SIP-20EH5W-BO4	RLVD Camera	KH-4A P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
86	NA	01941A0QB3	172.16.8.94	SIP-20EH5W-BO4	RLVD Camera	KH-4A P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
87	NA	01941A0QAD	172.16.8.103	SIP-20EH5W-BO4	RLVD Camera	KH-4B P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
88	NA	210235T9RN318B000123	172.16.8.104	SIP-20EH5W-BO4	RLVD Camera	KH-4B P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
89	NA	01941A0QBH	172.16.8.105	SIP-20EH5W-BO4	RLVD Camera	KH-4B P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
90	NA	01941A0QA3	172.16.8.106	SIP-20EH5W-BO4	RLVD Camera	KH-4B P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
91	NA	01941A0QBF	172.16.8.115	SIP-20EH5W-BO4	RLVD Camera	KH-5 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
92	NA	01941A0QA0	172.16.8.116	SIP-20EH5W-BO4	RLVD Camera	KH-5 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
93	NA	01941A0QBJ	172.16.8.117	SIP-20EH5W-BO4	RLVD Camera	KH-5 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
94	NA	01941A0QBY	172.16.8.118	SIP-20EH5W-BO4	RLVD Camera	KH-5 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
95	NA	01941A0QCR	172.16.8.127	SIP-20EH5W-BO4	RLVD Camera	KH-6 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
96	NA	01941A0QB8	172.16.8.128	SIP-20EH5W-BO4	RLVD Camera	KH-6 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
97	NA	01941A0QCB	172.16.8.129	SIP-20EH5W-BO4	RLVD Camera	KH-6 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
98	NA	01941A0QC4	172.16.8.130	SIP-20EH5W-BO4	RLVD Camera	KH-6 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
99	NA	01941A0QBQ	172.16.8.139	SIP-20EH5W-BO4	RLVD Camera	G-2 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
100	NA	01941A0QCU	172.16.8.140	SIP-20EH5W-BO4	RLVD Camera	G-2 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
101	NA	01941A0QC3	172.16.8.141	SIP-20EH5W-BO4	RLVD Camera	G-2 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
102	NA	01941A0QCJ	172.16.8.142	SIP-20EH5W-BO4	RLVD Camera	G-2 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
103	NA	01941A0QAZ	172.16.8.151	SIP-20EH5W-BO4	RLVD Camera	G-3 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
104	NA	01941A0QC8	172.16.8.152	SIP-20EH5W-BO4	RLVD Camera	G-3 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
105	NA	01941A0QBS	172.16.8.153	SIP-20EH5W-BO4	RLVD Camera	G-3 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
106	NA	01941A0QBP	172.16.8.154	SIP-20EH5W-BO4	RLVD Camera	G-3 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
107	NA	0171EA149U	172.16.8.163	SIP-20EH5W-BO4	RLVD Camera	G-5 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
108	NA	01941A0QBA	172.16.8.164	SIP-20EH5W-BO4	RLVD Camera	G-5 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
109	NA	01941A0QA9	172.16.8.165	SIP-20EH5W-BO4	RLVD Camera	G-5 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
110	NA	01941A0QA8	172.16.8.166	SIP-20EH5W-BO4	RLVD Camera	G-5 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
111	NA	01941A0Q9Z	172.16.8.175	SIP-20EH5W-BO4	RLVD Camera	G-6 P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
112	NA	01941A0QAG	172.16.8.176	SIP-20EH5W-BO4	RLVD Camera	G-6 P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
113	NA	01941A0QA9	172.16.8.177	SIP-20EH5W-BO4	RLVD Camera	G-6 P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
114	NA	01941A0QAH	172.16.8.178	SIP-20EH5W-BO4	RLVD Camera	G-6 P4 RLVD	ICCC	7.2.1.309	Secura	INDIA
115	NA	01941A0QAM	172.16.8.185	SIP-20EH5W-BO4	RLVD Camera	CH-4A P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
116	NA	01941A0QAK	172.16.8.186	SIP-20EH5W-BO4	RLVD Camera	CH-4A P2 RLVD	ICCC	7.2.1.309	Secura	INDIA
117	NA	01941A0QB2	172.16.8.187	SIP-20EH5W-BO4	RLVD Camera	CH-4A P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
118	NA	01941A0QAJ	172.16.8.196	SIP-20EH5W-BO4	RLVD Camera	AK-BO P1 RLVD	ICCC	7.2.1.309	Secura	INDIA
119	NA	01941A0Q9X	172.16.8.197	SIP-20EH5W-BO4	RLVD Camera	AK-BO P2 RLVD	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
120	NA	01941A0QAX	172.16.8.198	SIP-20EH5W-BO4	RLVD Camera	AK-BO P3 RLVD	ICCC	7.2.1.309	Secura	INDIA
121	NA	01941A0QAT	172.16.8.199	SIP-20EH5W-BO4	RLVD Camera	AK-BO P4 RLVD	ICCC	7.2.1.309	Secura	INDIA

43.3.8 ANPR Camera

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073427	172.16.14.35	DS-2CD4C36FWD-AP	ANPR-1	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
2	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073380	172.16.14.36	DS-2CD4C36FWD-AP	ANPR-2	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
3	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073315	172.16.14.37	DS-2CD4C36FWD-AP	ANPR-3	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
4	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073331	172.16.14.38	DS-2CD4C36FWD-AP	ANPR-4	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
5	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073338	172.16.14.39	DS-2CD4C36FWD-AP	ANPR-5	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
6	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073408	172.16.14.40	DS-2CD4C36FWD-AP	ANPR-6	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
7	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463469	172.16.14.41	DS-2CD4C36FWD-AP	ANPR-7	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
8	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463485	172.16.14.42	DS-2CD4C36FWD-AP	ANPR-8	GEB Colony Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
9	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073409	172.16.14.47	DS-2CD4C36FWD-AP	ANPR-1	Pethapur Crossroads	ICCC	7.2.1.611 Oct	Hikvision	INDIA
10	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073319	172.16.14.48	DS-2CD4C36FWD-AP	ANPR-2	Pethapur Crossroads	ICCC	7.2.1.611 Oct	Hikvision	INDIA
11	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073458	172.16.14.49	DS-2CD4C36FWD-AP	ANPR-3	Pethapur Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
12	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073367	172.16.14.50	DS-2CD4C36FWD-AP	ANPR-4	Pethapur Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
13	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073344	172.16.14.51	DS-2CD4C36FWD-AP	ANPR-5	Pethapur Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
14	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073370	172.16.14.52	DS-2CD4C36FWD-AP	ANPR-6	Pethapur Crossroads	ICCC	V5.7.1 build 211203	Hikvision	INDIA
15	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073327	172.16.14.53	DS-2CD4C36FWD-AP	ANPR-7	Pethapur Crossroads	ICCC	7.2.1.611 Oct	Hikvision	INDIA
16	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073411	172.16.14.54	DS-2CD4C36FWD-AP	ANPR-8	Pethapur Crossroads	ICCC	7.2.1.611 Oct	Hikvision	INDIA
17	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073398	172.16.14.59	DS-2CD4C36FWD-AP	ANPR-1	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
18	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463470	172.16.14.60	DS-2CD4C36FWD-AP	ANPR-2	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
19	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463456	172.16.14.61	DS-2CD4C36FWD-AP	ANPR-3	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
20	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073381	172.16.14.62	DS-2CD4C36FWD-AP	ANPR-4	Randeja Crossroad	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
								211203		
21	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073480	172.16.14.63	DS-2CD4C36FWD-AP	ANPR-5	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
22	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073316	172.16.14.64	DS-2CD4C36FWD-AP	ANPR-6	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
23	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073454	172.16.14.65	DS-2CD4C36FWD-AP	ANPR-7	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
24	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463475	172.16.14.66	DS-2CD4C36FWD-AP	ANPR-8	Randeja Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
25	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073429	172.16.14.71	DS-2CD4C36FWD-AP	ANPR-1	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
26	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073410	172.16.14.72	DS-2CD4C36FWD-AP	ANPR-2	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
27	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073488	172.16.14.73	DS-2CD4C36FWD-AP	ANPR-3	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
28	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073491	172.16.14.74	DS-2CD4C36FWD-AP	ANPR-4	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
29	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073356	172.16.14.75	DS-2CD4C36FWD-AP	ANPR-5	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
30	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073388	172.16.14.76	DS-2CD4C36FWD-AP	ANPR-6	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
31	N/A	DS-2CD4C36FWD-	172.16.14.77	DS-2CD4C3	ANPR-7	K-6	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073431		6FWD-AP				211203		
32	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073474	172.16.14.78	DS-2CD4C36FWD-AP	ANPR-8	K-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
33	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073339	172.16.14.83	DS-2CD4C36FWD-AP	ANPR-1	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
34	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073375	172.16.14.84	DS-2CD4C36FWD-AP	ANPR-2	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
35	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073379	172.16.14.85	DS-2CD4C36FWD-AP	ANPR-3	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
36	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073353	172.16.14.86	DS-2CD4C36FWD-AP	ANPR-4	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
37	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073323	172.16.14.87	DS-2CD4C36FWD-AP	ANPR-5	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
38	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073495	172.16.14.88	DS-2CD4C36FWD-AP	ANPR-6	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
39	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073508	172.16.14.89	DS-2CD4C36FWD-AP	ANPR-7	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
40	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073508	172.16.14.90	DS-2CD4C36FWD-AP	ANPR-8	K-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
41	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073510	172.16.14.95	DS-2CD4C36FWD-AP	ANPR-1	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
42	N/A	DS-2CD4C36FWD-	172.16.14.96	DS-2CD4C3	ANPR-2	Reliance Crossroad	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073406		6FWD-AP				211203		
43	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073461	172.16.14.97	DS-2CD4C36FWD-AP	ANPR-3	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
44	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073337	172.16.14.98	DS-2CD4C36FWD-AP	ANPR-4	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
45	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073492	172.16.14.99	DS-2CD4C36FWD-AP	ANPR-5	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
46	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073467	172.16.14.100	DS-2CD4C36FWD-AP	ANPR-6	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
47	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073493	172.16.14.101	DS-2CD4C36FWD-AP	ANPR-7	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
48	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073412	172.16.14.102	DS-2CD4C36FWD-AP	ANPR-8	Reliance Crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
49	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073523	172.16.14.108	DS-2CD4C36FWD-AP	ANPR-2	K-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
50	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073448	172.16.14.109	DS-2CD4C36FWD-AP	ANPR-3	K-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
51	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073530	172.16.14.110	DS-2CD4C36FWD-AP	ANPR-4	K-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
52	N/A	S-2CD4C36FWD-AP20220107AAWRJ29073515	172.16.14.111	DS-2CD4C36FWD-AP	ANPR-5	K-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
53	N/A	DS-2CD4C36FWD-	172.16.14.112	DS-2CD4C3	ANPR-6	K-7	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073378		6FWD-AP				211203		
54	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073335	172.16.14.119	DS-2CD4C36FWD-AP	ANPR-1	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
55	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073477	172.16.14.120	DS-2CD4C36FWD-AP	ANPR-2	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
56	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073376	172.16.14.121	DS-2CD4C36FWD-AP	ANPR-3	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
57	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073529	172.16.14.122	DS-2CD4C36FWD-AP	ANPR-4	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
58	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073396	172.16.14.123	DS-2CD4C36FWD-AP	ANPR-5	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
59	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073534	172.16.14.124	DS-2CD4C36FWD-AP	ANPR-6	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
60	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073349	172.16.14.125	DS-2CD4C36FWD-AP	ANPR-7	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
61	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073387	172.16.14.126	DS-2CD4C36FWD-AP	ANPR-8	KH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
62	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073527	172.16.14.131	DS-2CD4C36FWD-AP	ANPR-1	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
63	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073321	172.16.14.132	DS-2CD4C36FWD-AP	ANPR-2	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
64	N/A	DS-2CD4C36FWD-	172.16.14.133	DS-2CD4C3	ANPR-3	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073403		6FWD-AP				211203		
65	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073466	172.16.14.134	DS-2CD4C36FWD-AP	ANPR-4	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
66	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073494	172.16.14.135	DS-2CD4C36FWD-AP	ANPR-5	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
67	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463442	172.16.14.136	DS-2CD4C36FWD-AP	ANPR-6	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
68	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073404	172.16.14.137	DS-2CD4C36FWD-AP	ANPR-7	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
69	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073385	172.16.14.138	DS-2CD4C36FWD-AP	ANPR-8	Vasana Hadmathiya (KH-0.5)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
70	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073455	172.16.14.143	DS-2CD4C36FWD-AP	ANPR-1	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
71	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073518	172.16.14.144	DS-2CD4C36FWD-AP	ANPR-2	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
72	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073516	172.16.14.145	DS-2CD4C36FWD-AP	ANPR-3	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
73	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073426	172.16.14.146	DS-2CD4C36FWD-AP	ANPR-4	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
74	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073422	172.16.14.147	DS-2CD4C36FWD-AP	ANPR-5	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
75	N/A	DS-2CD4C36FWD-	172.16.14.148	DS-2CD4C3	ANPR-6	CHH-6	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073468		6FWD-AP				211203		
76	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073453	172.16.14.149	DS-2CD4C36FWD-AP	ANPR-7	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
77	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073345	172.16.14.150	DS-2CD4C36FWD-AP	ANPR-8	CHH-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
78	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073506	172.16.14.155	DS-2CD4C36FWD-AP	ANPR-1	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
79	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073359	172.16.14.156	DS-2CD4C36FWD-AP	ANPR-2	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
80	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463459	172.16.14.157	DS-2CD4C36FWD-AP	ANPR-3	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
81	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073384	172.16.14.158	DS-2CD4C36FWD-AP	ANPR-4	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
82	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073511	172.16.14.159	DS-2CD4C36FWD-AP	ANPR-5	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
83	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073342	172.16.14.160	DS-2CD4C36FWD-AP	ANPR-6	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
84	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073405	172.16.14.161	DS-2CD4C36FWD-AP	ANPR-7	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
85	N/A	DS-2CD4B25G0-IZS20211228AAWRJ31463443	172.16.14.162	DS-2CD4C36FWD-AP	ANPR-8	CHH-4A	ICCC	V5.7.1 build 211203	Hikvision	INDIA
86	N/A	DS-2CD4C36FWD-	172.16.14.167	DS-2CD4C3	ANPR-1	KH-0	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073439		6FWD-AP				211203		
87	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073386	172.16.14.168	DS-2CD4C36FWD-AP	ANPR-2	KH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
88	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073333	172.16.14.169	DS-2CD4C36FWD-AP	ANPR-3	KH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
89	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073498	172.16.14.170	DS-2CD4C36FWD-AP	ANPR-4	KH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
90	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073333	172.16.14.171	DS-2CD4C36FWD-AP	ANPR-5	KH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
91	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073413	172.16.14.172	DS-2CD4C36FWD-AP	ANPR-6	KH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
92	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073325	172.16.14.173	DS-2CD4C36FWD-AP	ANPR-7	KH-0	ICCC	7.2.1.611 Oct 8 2019	Hikvision	INDIA
93	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073330	172.16.14.174	DS-2CD4C36FWD-AP	ANPR-8	KH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
94	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073334	172.16.14.179	DS-2CD4C36FWD-AP	ANPR-1	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
95	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073505	172.16.14.180	DS-2CD4C36FWD-AP	ANPR-2	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
96	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073469	172.16.14.181	DS-2CD4C36FWD-AP	ANPR-3	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
97	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073432	172.16.14.182	DS-2CD4C36FWD-AP	ANPR-4	GH-0	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
								211203		
98	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073402	172.16.14.183	DS-2CD4C36FWD-AP	ANPR-5	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
99	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073447	172.16.14.184	DS-2CD4C36FWD-AP	ANPR-6	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
100	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073478	172.16.14.185	DS-2CD4C36FWD-AP	ANPR-7	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
101	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073524	172.16.14.186	DS-2CD4C36FWD-AP	ANPR-8	GH-0	ICCC	V5.7.1 build 211203	Hikvision	INDIA
102	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073455	172.16.14.191	DS-2CD4C36FWD-AP	ANPR-1	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
103	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073528	172.16.14.192	DS-2CD4C36FWD-AP	ANPR-2	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
104	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073389	172.16.14.193	DS-2CD4C36FWD-AP	ANPR-3	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
105	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073531	172.16.14.194	DS-2CD4C36FWD-AP	ANPR-4	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
106	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073363	172.16.14.195	DS-2CD4C36FWD-AP	ANPR-5	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
107	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073536	172.16.14.196	DS-2CD4C36FWD-AP	ANPR-6	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
108	N/A	DS-2CD4C36FWD-	172.16.14.197	DS-2CD4C3	ANPR-7	Sarita Udhyan (J-3)	ICCC	V5.7.1 build	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073395		6FWD-AP				211203		
109	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073500	172.16.14.198	DS-2CD4C36FWD-AP	ANPR-8	Sarita Udhyan (J-3)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
110	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073322	172.16.14.204	DS-2CD4C36FWD-AP	ANPR-2	CH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
111	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073420	172.16.14.205	DS-2CD4C36FWD-AP	ANPR-3	CH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
112	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073317	172.16.14.206	DS-2CD4C36FWD-AP	ANPR-4	CH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
113	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073434	172.16.14.207	DS-2CD4C36FWD-AP	ANPR-5	CH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
114	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073393	172.16.14.208	DS-2CD4C36FWD-AP	ANPR-6	CH-7	ICCC	V5.7.1 build 211203	Hikvision	INDIA
115	NA	0180JA0J1F	172.16.5.51	SIP-20EH5W-BO4	ANPR Camera	CH-3 P1 L1	ICCC	7.2.1.611 Oct	Secura	INDIA
116	NA	0180JA0J1H	172.16.5.52	SIP-20EH5W-BO4	ANPR Camera	CH-3 P1 L2	ICCC	7.2.1.611 Oct	Secura	INDIA
117	NA	0180JA0HYS	172.16.5.53	SIP-20EH5W-BO4	ANPR Camera	CH-3 P2 L1	ICCC	7.2.1.611 Oct	Secura	INDIA
118	NA	0180JA0J1L	172.16.5.54	SIP-20EH5W-BO4	ANPR Camera	CH-3 P2 L2	ICCC	7.2.1.611 Oct	Secura	INDIA
119	NA	0180JA0HZ4	172.16.5.55	SIP-20EH5W-BO4	ANPR Camera	CH-3 P3 L1	ICCC	7.2.1.611 Oct	Secura	INDIA
120	NA	0180JA0J0B	172.16.5.56	SIP-20EH5W-BO4	ANPR Camera	CH-3 P3 L2	ICCC	7.2.1.611 Oct	Secura	INDIA
121	NA	0180JA0HZ2	172.16.5.57	SIP-20EH5W-BO4	ANPR Camera	CH-3 P4 L1	ICCC	7.2.1.611 Oct	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
122	NA	0180JA0HYZ	172.16.5.58	SIP-20EH5W-BO4	ANPR Camera	CH-3 P4 L2	ICCC	7.2.1.611 Oct	Secura	INDIA
123	NA	0180JA0J0D	172.16.5.63	SIP-20EH5W-BO4	ANPR Camera	GH-3 P1L1	ICCC	7.2.1.611 Oct	Secura	INDIA
124	NA	0180JA0J14	172.16.5.64	SIP-20EH5W-BO4	ANPR Camera	GH-3 P1L2	ICCC	7.2.1.611 Oct	Secura	INDIA
125	NA	0180JA0HZE	172.16.5.65	SIP-20EH5W-BO4	ANPR Camera	GH-3 P2L1	ICCC	7.2.1.611 Oct	Secura	INDIA
126	NA	0180JA0J0R	172.16.5.66	SIP-20EH5W-BO4	ANPR Camera	GH-3 P2L2	ICCC	7.2.1.611 Oct	Secura	INDIA
127	NA	0180JA0J0L	172.16.5.67	SIP-20EH5W-BO4	ANPR Camera	GH-3 P3L1	ICCC	7.2.1.611 Oct	Secura	INDIA
128	NA	0180JA0J0M	172.16.5.68	SIP-20EH5W-BO4	ANPR Camera	GH-3 P3L2	ICCC	7.2.1.611 Oct	Secura	INDIA
129	NA	0180JA0J1J	172.16.5.69	SIP-20EH5W-BO4	ANPR Camera	GH-3 P4L1	ICCC	7.2.1.611 Oct	Secura	INDIA
130	NA	0180JA0HZJ	172.16.5.70	SIP-20EH5W-BO4	ANPR Camera	GH-3 P4L2	ICCC	7.2.1.611 Oct	Secura	INDIA
131	NA	0180JA0J16	172.16.5.75	SIP-20EH5W-BO4	ANPR Camera	CH-5 P1L1	ICCC	7.2.1.611 Oct	Secura	INDIA
132	NA	0180JA0HZL	172.16.5.76	SIP-20EH5W-BO4	ANPR Camera	CH-5 P1L2	ICCC	7.2.1.611 Oct	Secura	INDIA
133	NA	0180JA0J05	172.16.5.77	SIP-20EH5W-BO4	ANPR Camera	CH-5 P2L1	ICCC	7.2.1.611 Oct	Secura	INDIA
134	NA	0180JA0J15	172.16.5.78	SIP-20EH5W-BO4	ANPR Camera	CH-5 P2L2	ICCC	7.2.1.611 Oct	Secura	INDIA
135	NA	0180JA0J0E	172.16.5.79	SIP-20EH5W-BO4	ANPR Camera	CH-5 P3L1	ICCC	7.2.1.611 Oct	Secura	INDIA
136	NA	0180JA0J08	172.16.5.80	SIP-20EH5W-BO4	ANPR Camera	CH-5 P3L2	ICCC	7.2.1.611 Oct	Secura	INDIA
137	NA	0180JA0J0Y	172.16.5.81	SIP-20EH5W-BO4	ANPR Camera	CH-5 P4L1	ICCC	7.2.1.611 Oct	Secura	INDIA
138	NA	0180JA0J0U	172.16.5.82	SIP-20EH5W-BO4	ANPR Camera	CH-5 P4L2	ICCC	7.2.1.611 Oct	Secura	INDIA
139	NA	0180JA0HZ7	172.16.5.87	SIP-20EH5W-BO4	ANPR Camera	GH-2 P1L1	ICCC	7.2.1.611 Oct	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
140	NA	0180JA0HYW	172.16.5.88	SIP-20EH5W-BO4	ANPR Camera	GH-2 P1L2	ICCC	7.2.1.611 Oct	Secura	INDIA
141	NA	0180JA0HZD	172.16.5.89	SIP-20EH5W-BO4	ANPR Camera	GH-2 P2L1	ICCC	7.2.1.611 Oct	Secura	INDIA
142	NA	0180JA0J1A	172.16.5.90	SIP-20EH5W-BO4	ANPR Camera	GH-2 P2L2	ICCC	7.2.1.611 Oct	Secura	INDIA
143	NA	0180JA0J0A	172.16.5.91	SIP-20EH5W-BO4	ANPR Camera	GH-2 P3L1	ICCC	7.2.1.611 Oct	Secura	INDIA
144	NA	0180JA0J19	172.16.5.92	SIP-20EH5W-BO4	ANPR Camera	GH-2 P3L2	ICCC	7.2.1.611 Oct	Secura	INDIA
145	NA	0180JA0J0F	172.16.5.93	SIP-20EH5W-BO4	ANPR Camera	GH-2 P4L1	ICCC	7.2.1.611 Oct	Secura	INDIA
146	NA	0180JA0HZ8	172.16.5.94	SIP-20EH5W-BO4	ANPR Camera	GH-2 P4L2	ICCC	7.2.1.611 Oct	Secura	INDIA
147	NA	0180JA0HZY	172.16.5.99	SIP-20EH5W-BO4	ANPR Camera	GH-7 P1L1	ICCC	7.2.1.611 Oct	Secura	INDIA
148	NA	0180JA0J0G	172.16.5.100	SIP-20EH5W-BO4	ANPR Camera	GH-7 P1L2	ICCC	7.2.1.611 Oct	Secura	INDIA
149	NA	0180JA0J0K	172.16.5.101	SIP-20EH5W-BO4	ANPR Camera	GH-7 P2L1	ICCC	7.2.1.611 Oct	Secura	INDIA
150	NA	0180JA0J0P	172.16.5.102	SIP-20EH5W-BO4	ANPR Camera	GH-7 P2L2	ICCC	7.2.1.611 Oct	Secura	INDIA
151	NA	0180JA0J0X	172.16.5.103	SIP-20EH5W-BO4	ANPR Camera	GH-7 P3L1	ICCC	7.2.1.611 Oct	Secura	INDIA
152	NA	0180JA0HZH	172.16.5.104	SIP-20EH5W-BO4	ANPR Camera	GH-7 P3L2	ICCC	7.2.1.611 Oct	Secura	INDIA
153	NA	0180JA0J0C	172.16.5.105	SIP-20EH5W-BO4	ANPR Camera	GH-7 P4L1	ICCC	7.2.1.611 Oct	Secura	INDIA
154	NA	0180JA0J0S	172.16.5.106	SIP-20EH5W-BO4	ANPR Camera	GH-7 P4L2	ICCC	7.2.1.611 Oct	Secura	INDIA
155	NA	Z1942A006W	172.16.8.71	SIP-20EH5W-BO4	ANPR Camera	KH-3 P1L1	ICCC	7.2.1.309	Secura	INDIA
156	NA	Z1942A006J	172.16.8.72	SIP-20EH5W-BO4	ANPR Camera	KH-3 P1L2	ICCC	7.2.1.309	Secura	INDIA
157	NA	Z1942A0078	172.16.8.73	SIP-20EH5W-BO4	ANPR Camera	KH-3 P2L1	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
158	NA	Z1942A006E	172.16.8.74	SIP-20EH5W-BO4	ANPR Camera	KH-3 P2L2	ICCC	7.2.1.309	Secura	INDIA
159	NA	Z1942A006Q	172.16.8.75	SIP-20EH5W-BO4	ANPR Camera	KH-3 P3L1	ICCC	7.2.1.309	Secura	INDIA
160	NA	Z1942A005U	172.16.8.76	SIP-20EH5W-BO4	ANPR Camera	KH-3 P3L2	ICCC	7.2.1.309	Secura	INDIA
161	NA	Z1942A005Y	172.16.8.77	SIP-20EH5W-BO4	ANPR Camera	KH-3 P4L1	ICCC	7.2.1.309	Secura	INDIA
162	NA	Z1942A0054	172.16.8.78	SIP-20EH5W-BO4	ANPR Camera	KH-3 P4L2	ICCC	7.2.1.309	Secura	INDIA
163	NA	Z1942A005S	172.16.8.83	SIP-20EH5W-BO4	ANPR Camera	KH-4A P1L1	ICCC	7.2.1.309	Secura	INDIA
164	NA	Z1942A005W	172.16.8.84	SIP-20EH5W-BO4	ANPR Camera	KH-4A P1L2	ICCC	7.2.1.309	Secura	INDIA
165	NA	Z1942A006V	172.16.8.85	SIP-20EH5W-BO4	ANPR Camera	KH-4A P2L1	ICCC	7.2.1.309	Secura	INDIA
166	NA	Z1942A005B	172.16.8.86	SIP-20EH5W-BO4	ANPR Camera	KH-4A P2L2	ICCC	7.2.1.309	Secura	INDIA
167	NA	Z1941A0QBR	172.16.8.87	SIP-20EH5W-BO4	ANPR Camera	KH-4A P3L1	ICCC	7.2.1.309	Secura	INDIA
168	NA	Z1942A007B	172.16.8.88	SIP-20EH5W-BO4	ANPR Camera	KH-4A P3L2	ICCC	7.2.1.309	Secura	INDIA
169	NA	Z1942A0068	172.16.8.89	SIP-20EH5W-BO4	ANPR Camera	KH-4A P4L1	ICCC	7.2.1.309	Secura	INDIA
170	NA	Z1942A005F	172.16.8.90	SIP-20EH5W-BO4	ANPR Camera	KH-4A P4L2	ICCC	7.2.1.309	Secura	INDIA
171	NA	Z1942A006N	172.16.8.95	SIP-20EH5W-BO4	ANPR Camera	KH-4B P1L1	ICCC	7.2.1.309	Secura	INDIA
172	NA	Z1942A0067	172.16.8.96	SIP-20EH5W-BO4	ANPR Camera	KH-4B P1L2	ICCC	7.2.1.309	Secura	INDIA
173	NA	Z1942A006T	172.16.8.97	SIP-20EH5W-BO4	ANPR Camera	KH-4B P2L1	ICCC	7.2.1.309	Secura	INDIA
174	NA	Z1942A006G	172.16.8.98	SIP-20EH5W-BO4	ANPR Camera	KH-4B P2L2	ICCC	7.2.1.309	Secura	INDIA
175	NA	Z1942A006B	172.16.8.99	SIP-20EH5W-BO4	ANPR Camera	KH-4B P3L1	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
176	NA	210235T9RN318B000168	172.16.8.100	SIP-20EH5W-BO4	ANPR Camera	KH-4B P3L2	ICCC	7.2.1.309	Secura	INDIA
177	NA	Z1942A005Z	172.16.8.101	SIP-20EH5W-BO4	ANPR Camera	KH-4B P4L1	ICCC	7.2.1.309	Secura	INDIA
178	NA	Z1942A006C	172.16.8.102	SIP-20EH5W-BO4	ANPR Camera	KH-4B P4L2	ICCC	7.2.1.309	Secura	INDIA
179	NA	Z1942A007R	172.16.8.107	SIP-20EH5W-BO4	ANPR Camera	KH-5 P1L1	ICCC	7.2.1.309	Secura	INDIA
180	NA	Z1942A0075	172.16.8.108	SIP-20EH5W-BO4	ANPR Camera	KH-5 P1L2	ICCC	7.2.1.309	Secura	INDIA
181	NA	Z1942A007W	172.16.8.109	SIP-20EH5W-BO4	ANPR Camera	KH-5 P2L1	ICCC	7.2.1.309	Secura	INDIA
182	NA	Z1942A0056	172.16.8.110	SIP-20EH5W-BO4	ANPR Camera	KH-5 P2L2	ICCC	7.2.1.309	Secura	INDIA
183	NA	Z1942A005T	172.16.8.111	SIP-20EH5W-BO4	ANPR Camera	KH-5 P3L1	ICCC	7.2.1.309	Secura	INDIA
184	NA	Z1942A006D	172.16.8.112	SIP-20EH5W-BO4	ANPR Camera	KH-5 P3L2	ICCC	7.2.1.309	Secura	INDIA
185	NA	Z1942A007Q	172.16.8.113	SIP-20EH5W-BO4	ANPR Camera	KH-5 P4L1	ICCC	7.2.1.309	Secura	INDIA
186	NA	Z1942A006A	172.16.8.114	SIP-20EH5W-BO4	ANPR Camera	KH-5 P4L2	ICCC	7.2.1.309	Secura	INDIA
187	NA	0190EA02FP	172.16.8.119	SIP-20EH5W-BO4	ANPR Camera	KH-6 P1L1	ICCC	7.2.1.309	Secura	INDIA
188	NA	Z1942A0072	172.16.8.120	SIP-20EH5W-BO4	ANPR Camera	KH-6 P1L2	ICCC	7.2.1.309	Secura	INDIA
189	NA	Z1942A006Y	172.16.8.121	SIP-20EH5W-BO4	ANPR Camera	KH-6 P2L1	ICCC	7.2.1.309	Secura	INDIA
190	NA	Z1942A007E	172.16.8.122	SIP-20EH5W-BO4	ANPR Camera	KH-6 P2L2	ICCC	7.2.1.309	Secura	INDIA
191	NA	Z1942A0062	172.16.8.123	SIP-20EH5W-BO4	ANPR Camera	KH-6 P3L1	ICCC	7.2.1.309	Secura	INDIA
192	NA	Z1942A0073	172.16.8.124	SIP-20EH5W-BO4	ANPR Camera	KH-6 P3L2	ICCC	7.2.1.309	Secura	INDIA
193	NA	Z1942A006K	172.16.8.125	SIP-20EH5W-BO4	ANPR Camera	KH-6 P4L1	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
194	NA	Z1942A007A	172.16.8.126	SIP-20EH5W-BO4	ANPR Camera	KH-6 P4L2	ICCC	7.2.1.309	Secura	INDIA
195	NA	Z1942A006P	172.16.8.131	SIP-20EH5W-BO4	ANPR Camera	G-2 P1L1	ICCC	7.2.1.309	Secura	INDIA
196	NA	Z1942A005N	172.16.8.132	SIP-20EH5W-BO4	ANPR Camera	G-2 P1L2	ICCC	7.2.1.309	Secura	INDIA
197	NA	Z1942A006S	172.16.8.133	SIP-20EH5W-BO4	ANPR Camera	G-2 P2L1	ICCC	7.2.1.309	Secura	INDIA
198	NA	Z1942A007Z	172.16.8.134	SIP-20EH5W-BO4	ANPR Camera	G-2 P2L2	ICCC	7.2.1.309	Secura	INDIA
199	NA	Z1942A0053	172.16.8.135	SIP-20EH5W-BO4	ANPR Camera	G-2 P3L1	ICCC	7.2.1.309	Secura	INDIA
200	NA	Z1942A0074	172.16.8.136	SIP-20EH5W-BO4	ANPR Camera	G-2 P3L2	ICCC	7.2.1.309	Secura	INDIA
201	NA	Z1942A005R	172.16.8.137	SIP-20EH5W-BO4	ANPR Camera	G-2 P4L1	ICCC	7.2.1.309	Secura	INDIA
202	NA	Z1942A007U	172.16.8.138	SIP-20EH5W-BO4	ANPR Camera	G-2 P4L2	ICCC	7.2.1.309	Secura	INDIA
203	NA	Z1942A007C	172.16.8.143	SIP-20EH5W-BO4	ANPR Camera	G-3 P1L1	ICCC	7.2.1.309	Secura	INDIA
204	NA	Z1942A007F	172.16.8.144	SIP-20EH5W-BO4	ANPR Camera	G-3 P1L2	ICCC	7.2.1.309	Secura	INDIA
205	NA	Z1942A005G	172.16.8.145	SIP-20EH5W-BO4	ANPR Camera	G-3 P2L1	ICCC	7.2.1.309	Secura	INDIA
206	NA	Z1942A007L	172.16.8.146	SIP-20EH5W-BO4	ANPR Camera	G-3 P2L2	ICCC	7.2.1.309	Secura	INDIA
207	NA	Z1942A007B	172.16.8.147	SIP-20EH5W-BO4	ANPR Camera	G-3 P3L1	ICCC	7.2.1.309	Secura	INDIA
208	NA	Z1942A0059	172.16.8.148	SIP-20EH5W-BO4	ANPR Camera	G-3 P3L2	ICCC	7.2.1.309	Secura	INDIA
209	NA	Z1942A006M	172.16.8.149	SIP-20EH5W-BO4	ANPR Camera	G-3 P4L1	ICCC	7.2.1.309	Secura	INDIA
210	NA	Z1942A005X	172.16.8.150	SIP-20EH5W-BO4	ANPR Camera	G-3 P4L2	ICCC	7.2.1.309	Secura	INDIA
211	NA	Z1942A0066	172.16.8.155	SIP-20EH5W-BO4	ANPR Camera	G-5 P1L1	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
212	NA	Z1942A005Q	172.16.8.156	SIP-20EH5W-BO4	ANPR Camera	G-5 P1L2	ICCC	7.2.1.309	Secura	INDIA
213	NA	Z1942A005P	172.16.8.157	SIP-20EH5W-BO4	ANPR Camera	G-5 P2L1	ICCC	7.2.1.309	Secura	INDIA
214	NA	Z1942A005C	172.16.8.158	SIP-20EH5W-BO4	ANPR Camera	G-5 P2L2	ICCC	7.2.1.309	Secura	INDIA
215	NA	Z1942A005D	172.16.8.159	SIP-20EH5W-BO4	ANPR Camera	G-5 P3L1	ICCC	7.2.1.309	Secura	INDIA
216	NA	Z1942A005L	172.16.8.160	SIP-20EH5W-BO4	ANPR Camera	G-5 P3L2	ICCC	7.2.1.309	Secura	INDIA
217	NA	Z1942A005M	172.16.8.161	SIP-20EH5W-BO4	ANPR Camera	G-5 P4L1	ICCC	7.2.1.309	Secura	INDIA
218	NA	Z1942A005E	172.16.8.162	SIP-20EH5W-BO4	ANPR Camera	G-5 P4L2	ICCC	7.2.1.309	Secura	INDIA
219	NA	Z1942A0057	172.16.8.167	SIP-20EH5W-BO4	ANPR Camera	G-6 P1L1	ICCC	7.2.1.309	Secura	INDIA
220	NA	Z1942A007K	172.16.8.168	SIP-20EH5W-BO4	ANPR Camera	G-6 P1L2	ICCC	7.2.1.309	Secura	INDIA
221	NA	Z1942A005H	172.16.8.169	SIP-20EH5W-BO4	ANPR Camera	G-6 P2L1	ICCC	7.2.1.309	Secura	INDIA
222	NA	Z1942A0055	172.16.8.170	SIP-20EH5W-BO4	ANPR Camera	G-6 P2L2	ICCC	7.2.1.309	Secura	INDIA
223	NA	Z1942A005K	172.16.8.171	SIP-20EH5W-BO4	ANPR Camera	G-6 P3L1	ICCC	7.2.1.309	Secura	INDIA
224	NA	Z1942A005V	172.16.8.172	SIP-20EH5W-BO4	ANPR Camera	G-6 P3L2	ICCC	7.2.1.309	Secura	INDIA
225	NA	Z1942A0058	172.16.8.173	SIP-20EH5W-BO4	ANPR Camera	G-6 P4L1	ICCC	7.2.1.309	Secura	INDIA
226	NA	Z1942A006Z	172.16.8.174	SIP-20EH5W-BO4	ANPR Camera	G-6 P4L2	ICCC	7.2.1.309	Secura	INDIA
227	NA	Z1942A0079	172.16.8.179	SIP-20EH5W-BO4	ANPR Camera	CH-4A P1L1	ICCC	7.2.1.309	Secura	INDIA
228	NA	Z1942A0061	172.16.8.180	SIP-20EH5W-BO4	ANPR Camera	CH-4A P1L2	ICCC	7.2.1.309	Secura	INDIA
229	NA	Z1942A007P	172.16.8.181	SIP-20EH5W-BO4	ANPR Camera	CH-4A P2L1	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
230	NA	Z1942A007Y	172.16.8.182	SIP-20EH5W-BO4	ANPR Camera	CH-4A P2L2	ICCC	7.2.1.309	Secura	INDIA
231	NA	Z1942A0070	172.16.8.183	SIP-20EH5W-BO4	ANPR Camera	CH-4A P3L1	ICCC	7.2.1.309	Secura	INDIA
232	NA	Z1942A006R	172.16.8.184	SIP-20EH5W-BO4	ANPR Camera	CH-4A P3L2	ICCC	7.2.1.309	Secura	INDIA
233	NA	Z1942A006L	172.16.8.188	SIP-20EH5W-BO4	ANPR Camera	AK-BO P1L1	ICCC	7.2.1.309	Secura	INDIA
234	NA	Z1942A007S	172.16.8.189	SIP-20EH5W-BO4	ANPR Camera	AK-BO P1L2	ICCC	7.2.1.309	Secura	INDIA
235	NA	Z1942A007F	172.16.8.190	SIP-20EH5W-BO4	ANPR Camera	AK-BO P2L1	ICCC	7.2.1.309	Secura	INDIA
236	NA	Z1942A007G	172.16.8.191	SIP-20EH5W-BO4	ANPR Camera	AK-BO P2L2	ICCC	7.2.1.309	Secura	INDIA
237	NA	Z1942A007H	172.16.8.192	SIP-20EH5W-BO4	ANPR Camera	AK-BO P3L1	ICCC	7.2.1.309	Secura	INDIA
238	NA	Z1942A007D	172.16.8.193	SIP-20EH5W-BO4	ANPR Camera	AK-BO P3L2	ICCC	7.2.1.309	Secura	INDIA
239	NA	Z1942A005A	172.16.8.194	SIP-20EH5W-BO4	ANPR Camera	AK-BO P4L1	ICCC	7.2.1.309	Secura	INDIA
240	NA	Z1942A006H	172.16.8.195	SIP-20EH5W-BO4	ANPR Camera	AK-BO P4L2	ICCC	7.2.1.309	Secura	INDIA
241	N/A	DS-2CD5026G0-AP20200817AAWRE69827162	172.16.14.211	DS-2CD5026G0-AP	SVD Camera	G road (G2 to G3)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
242	N/A	DS-2CD5026G0-AP20200817AAWRE69827177	172.16.14.212	DS-2CD5026G0-AP	SVD Camera	G road (G2 to G3)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
243	N/A	DS-2CD5026G0-AP20200817AAWRE69827164	172.16.14.213	DS-2CD5026G0-AP	SVD Camera	G road (G2 to G3)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
244	N/A	DS-2CD5026G0-AP20200817AAWRE69827165	172.16.14.214	DS-2CD5026G0-AP	SVD Camera	G road (G2 to G3)	ICCC	V5.6.12 build 200729	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
245	N/A	DS-2CD5026G0-AP20200817AAWRE69827149	172.16.14.215	DS-2CD5026G0-AP	SVD Camera	KH road (KH-1 to KH-2)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
246	N/A	DS-2CD5026G0-AP20200817AAWRE69827157	172.16.14.216	DS-2CD5026G0-AP	SVD Camera	KH road (KH-1 to KH-2)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
247	N/A	DS-2CD5026G0-AP20200817AAWRE69827146	172.16.14.217	DS-2CD5026G0-AP	SVD Camera	KH road (KH-1 to KH-2)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
248	N/A	DS-2CD5026G0-AP20200817AAWRE69827155	172.16.14.218	DS-2CD5026G0-AP	SVD Camera	KH road (KH-1 to KH-2)	ICCC	V5.6.12 build 200729	Hikvision	INDIA
249	N/A	DS-2CD5026G0-AP20200817AAWRE69827204	172.16.14.219	DS-2CD5026G0-AP	SVD Camera	Uvarsad to Vavol Road	ICCC	V5.6.12 build 200729	Hikvision	INDIA
250	N/A	DS-2CD5026G0-AP20220104AAWRJ26702006	172.16.14.220	DS-2CD5026G0-AP	SVD Camera	Uvarsad to Vavol Road	ICCC	V5.6.12 build 200729	Hikvision	INDIA
251	N/A	DS-2CD5026G0-AP20200817AAWRE69827161	172.16.14.221	DS-2CD5026G0-AP	SVD Camera	Uvarsad to Vavol Road	ICCC	V5.6.12 build 200729	Hikvision	INDIA
252	N/A	DS-2CD5026G0-AP20200817AAWRE69827180	172.16.14.222	DS-2CD5026G0-AP	SVD Camera	Uvarsad to Vavol Road	ICCC	V5.6.12 build 200729	Hikvision	INDIA
253	N/A	DS-2CD5026G0-AP20220104AAWRJ26702004	172.16.14.223	DS-2CD5026G0-AP	SVD Camera	KH-0 to Reliance	ICCC	V5.6.12 build 200729	Hikvision	INDIA
254	N/A	DS-2CD5026G0-AP20200817AAWRE69827150	172.16.14.224	DS-2CD5026G0-AP	SVD Camera	KH-0 to Reliance	ICCC	V5.6.12 build 200729	Hikvision	INDIA
255	N/A	DS-2CD5026G0-AP20200817AAWRE69827183	172.16.14.225	DS-2CD5026G0-AP	SVD Camera	KH-0 to Reliance	ICCC	V5.6.12 build 200729	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
256	N/A	DS-2CD5026G0-AP20200817AAWRE69827202	172.16.14.226	DS-2CD5026G0-AP	SVD Camera	KH-0 to Reliance	ICCC	V5.6.12 build 200729	Hikvision	INDIA
257	N/A	DS-2CD5026G0-AP20200817AAWRE69827191	172.16.14.227	DS-2CD5026G0-AP	SVD Camera	Gh-0 to Reliance Crossroad	ICCC	V5.6.12 build 200729	Hikvision	INDIA
258	N/A	DS-2CD5026G0-AP20200817AAWRE69827153	172.16.14.228	DS-2CD5026G0-AP	SVD Camera	Gh-0 to Reliance Crossroad	ICCC	V5.6.12 build 200729	Hikvision	INDIA
259	N/A	DS-2CD5026G0-AP20200817AAWRE69827190	172.16.14.229	DS-2CD5026G0-AP	SVD Camera	Gh-0 to Reliance Crossroad	ICCC	V5.6.12 build 200729	Hikvision	INDIA
260	N/A	DS-2CD5026G0-AP20200817AAWRE69827185	172.16.14.230	DS-2CD5026G0-AP	SVD Camera	Gh-0 to Reliance Crossroad	ICCC	V5.6.12 build 200729	Hikvision	INDIA
261	N/A	DS-2CD5026G0-AP20200817AAWRE69827140	172.16.14.231	DS-2CD5026G0-AP	SVD Camera	J3 to J4	ICCC	V5.6.12 build 200729	Hikvision	INDIA
262	N/A	DS-2CD5026G0-AP20200817AAWRE69827143	172.16.14.232	DS-2CD5026G0-AP	SVD Camera	J3 to J4	ICCC	V5.6.12 build 200729	Hikvision	INDIA
263	N/A	DS-2CD5026G0-AP20200817AAWRE69827194	172.16.14.233	DS-2CD5026G0-AP	SVD Camera	J3 to J4	ICCC	V5.6.12 build 200729	Hikvision	INDIA
264	N/A	DS-2CD5026G0-AP20200817AAWRE69827159	172.16.14.234	DS-2CD5026G0-AP	SVD Camera	J3 to J4	ICCC	V5.6.12 build 200729	Hikvision	INDIA
265	N/A	DS-2CD5026G0-AP20220104AAWRJ26702003	172.16.14.235	DS-2CD5026G0-AP	SVD Camera	GH-7 to CH-7	ICCC	V5.6.12 build 200729	Hikvision	INDIA
266	N/A	DS-2CD5026G0-AP20200817AAWRE69827178	172.16.14.236	DS-2CD5026G0-AP	SVD Camera	GH-7 to CH-7	ICCC	V5.6.12 build 200729	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
267	N/A	DS-2CD5026G0-AP20200817AAWRE69827167	172.16.14.237	DS-2CD5026G0-AP	SVD Camera	GH-7 to CH-7	ICCC	V5.6.12 build 200729	Hikvision	INDIA
268	N/A	DS-2CD5026G0-AP20200817AAWRE69827142	172.16.14.238	DS-2CD5026G0-AP	SVD Camera	GH-7 to CH-7	ICCC	V5.6.12 build 200729	Hikvision	INDIA
269	N/A	DS-2CD5026G0-AP20200817AAWRE69827148	172.16.14.239	DS-2CD5026G0-AP	SVD Camera	CHH-4B to Jill Panchayat	ICCC	V5.6.12 build 200729	Hikvision	INDIA
270	N/A	DS-2CD5026G0-AP20200817AAWRE69827145	172.16.14.240	DS-2CD5026G0-AP	SVD Camera	CHH-4B to Jill Panchayat	ICCC	V5.6.12 build 200729	Hikvision	INDIA
271	N/A	DS-2CD5026G0-AP20200817AAWRE69827181	172.16.14.241	DS-2CD5026G0-AP	SVD Camera	CHH-4B to Jill Panchayat	ICCC	V5.6.12 build 200729	Hikvision	INDIA
272	N/A	DS-2CD5026G0-AP20200817AAWRE69827182	172.16.14.242	DS-2CD5026G0-AP	SVD Camera	CHH-4B to Jill Panchayat	ICCC	V5.6.12 build 200729	Hikvision	INDIA
273	NA	0180JA0J1C	172.16.5.115	SIP-20EH5W-BO4	SVD Camera	Between GH2-3	ICCC	7.2.1.309	Secura	INDIA
274	NA	0180JA0J1K	172.16.5.116	SIP-20EH5W-BO4	SVD Camera	Between GH2-3	ICCC	7.2.1.309	Secura	INDIA
275	NA	0180JA0J0H	172.16.5.117	SIP-20EH5W-BO4	SVD Camera	Between GH2-3	ICCC	7.2.1.309	Secura	INDIA
276	NA	0180JA0J1M	172.16.5.118	SIP-20EH5W-BO4	SVD Camera	Between GH2-3	ICCC	7.2.1.309	Secura	INDIA
277	NA	0180JA0HZA	172.16.5.119	SIP-20EH5W-BO4	SVD Camera	Between GH3-4	ICCC	7.2.1.309	Secura	INDIA
278	NA	0180JA0J1G	172.16.5.120	SIP-20EH5W-BO4	SVD Camera	Between GH3-4	ICCC	7.2.1.309	Secura	INDIA
279	NA	0180JA0J07	172.16.5.121	SIP-20EH5W-BO4	SVD Camera	Between GH3-4	ICCC	7.2.1.309	Secura	INDIA
280	NA	0180JA0J17	172.16.5.122	SIP-20EH5W-BO4	SVD Camera	Between GH3-4	ICCC	7.2.1.309	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
281	NA	0180JA0J09	172.16.5.123	SIP-20EH5W-BO4	SVD Camera	Between GH5-6	ICCC	7.2.1.309	Secura	INDIA
282	NA	0180JA0J0Q	172.16.5.124	SIP-20EH5W-BO4	SVD Camera	Between GH5-6	ICCC	7.2.1.309	Secura	INDIA
283	NA	0180JA0J1E	172.16.5.125	SIP-20EH5W-BO4	SVD Camera	Between GH5-6	ICCC	7.2.1.309	Secura	INDIA
284	NA	0180JA0J12	172.16.5.126	SIP-20EH5W-BO4	SVD Camera	Between GH5-6	ICCC	7.2.1.309	Secura	INDIA
285	NA	0180JA0J02	172.16.5.127	SIP-20EH5W-BO4	SVD Camera	Between CH5-6	ICCC	7.2.1.309	Secura	INDIA
286	NA	0180JA0HZF	172.16.5.128	SIP-20EH5W-BO4	SVD Camera	Between CH5-6	ICCC	7.2.1.309	Secura	INDIA
287	NA	0180JA0HZB	172.16.5.129	SIP-20EH5W-BO4	SVD Camera	Between CH5-6	ICCC	7.2.1.309	Secura	INDIA
288	NA	0180JA0HZK	172.16.5.130	SIP-20EH5W-BO4	SVD Camera	Between CH5-6	ICCC	7.2.1.309	Secura	INDIA

43.3.9 General Surveillance Camera

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073374	172.16.15.51	DS-2CD4C36FWD-AP	General surveillance	Randheja	ICCC	V5.7.1 build 211203	Hikvision	INDIA
2	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073446	172.16.15.52	DS-2CD4C36FWD-AP	General surveillance	Randheja	ICCC	V5.7.1 build 211203	Hikvision	INDIA
3	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073383	172.16.15.53	DS-2CD4C36FWD-AP	General surveillance	Randheja	ICCC	V5.7.1 build 211203	Hikvision	INDIA
4	N/A	DS-2DE7232IW-AE20210507	172.16.15.54	DS-2DE72	General surv	Randheja	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AAWRF94809345		32IW-AE	eillance					
5	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073472	172.16.15.55	DS-2CD4C36FWD-AP	General surveillance	Pethapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
6	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073459	172.16.15.56	DS-2CD4C36FWD-AP	General surveillance	Pethapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
7	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073476	172.16.15.57	DS-2CD4C36FWD-AP	General surveillance	Pethapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
8	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073440	172.16.15.58	DS-2CD4C36FWD-AP	General surveillance	Pethapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
9	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073416	172.16.15.59	DS-2CD4C36FWD-AP	General surveillance	Pethapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
10	N/A	DS-2DE7232IW-AE20210507AAWRF94809358	172.16.15.60	DS-2CD4C36FWD-AP	General surveillance	Pethapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
11	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073326	172.16.15.61	DS-2CD4C36FWD-AP	General surveillance	Vasana Hadmatiya	ICCC	V5.7.1 build 211203	Hikvision	INDIA
12	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073421	172.16.15.62	DS-2CD4C36FWD-AP	General surveillance	Vasana Hadmatiya	ICCC	V5.7.1 build 211203	Hikvision	INDIA
13	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073513	172.16.15.63	DS-2CD4C36FWD-AP	General surveillance	Vasana Hadmatiya	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
14	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073361	172.16.15.64	DS-2CD4C36FWD-AP	General surveillance	Vasana Hadmatiya	ICCC	V5.7.1 build 211203	Hikvision	INDIA
15	N/A	DS-2DE7232IW-AE20210507AAWRF94809322	172.16.15.65	DS-2CD4C36FWD-AP	General surveillance	Sargasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
16	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073377	172.16.15.66	DS-2CD4C36FWD-AP	General surveillance	Sargasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
17	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073507	172.16.15.67	DS-2CD4C36FWD-AP	General surveillance	Kolavada	ICCC	V5.7.1 build 211203	Hikvision	INDIA
18	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073329	172.16.15.68	DS-2CD4C36FWD-AP	General surveillance	Kolavada	ICCC	V5.7.1 build 211203	Hikvision	INDIA
19	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073390	172.16.15.75	DS-2CD4C36FWD-AP	General surveillance	Por	ICCC	V5.7.1 build 211203	Hikvision	INDIA
20	N/A	DS-2DE7232IW-AE20210507AAWRF94809305	172.16.15.76	DS-2CD4C36FWD-AP	General surveillance	Por	ICCC	V5.7.1 build 211203	Hikvision	INDIA
21	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073352	172.16.15.77	DS-2CD4C36FWD-AP	General surveillance	Por	ICCC	V5.7.1 build 211203	Hikvision	INDIA
22	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073418	172.16.15.78	DS-2CD4C36FWD-AP	General surveillance	Kudasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
23	N/A	DS-2CD4C36FWD-AP20220107	172.16.15.79	DS-2CD4C36FWD-AP	General surveillance	Kudasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AAWRJ29073470								
24	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073336	172.16.15.80	DS-2CD4C36FWD-AP	General surveillance	Kudasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
25	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073525	172.16.15.81	DS-2CD4C36FWD-AP	General surveillance	Kudasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
26	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073351	172.16.15.82	DS-2CD4C36FWD-AP	General surveillance	Randesan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
27	N/A	DS-2DE7232IW-AE20211104AAWRG94013582	172.16.15.83	DS-2CD4C36FWD-AP	General surveillance	Randesan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
28	N/A	DS-2DE7232IW-AE20211104AAWRG94013551	172.16.15.84	DS-2CD4C36FWD-AP	General surveillance	Randesan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
29	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073484	172.16.15.85	DS-2CD4C36FWD-AP	General surveillance	Randesan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
30	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073347	172.16.15.86	DS-2CD4C36FWD-AP	General surveillance	Rayasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
31	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073314	172.16.15.87	DS-2CD4C36FWD-AP	General surveillance	Rayasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
32	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073512	172.16.15.88	DS-2CD4C36FWD-AP	General surveillance	Rayasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA
33	N/A	DS-2CD4C36FWD-	172.16.15.89	DS-2CD4C36F	General surv	Rayasan	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AP20220107AAWRJ29073350		WD-AP	eillance					
34	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073475	172.16.15.101	DS-2CD4C36FWD-AP	General surveillance	Dholakuva	ICCC	V5.7.1 build 211203	Hikvision	INDIA
35	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073328	172.16.15.102	DS-2CD4C36FWD-AP	General surveillance	Dholakuva	ICCC	V5.7.1 build 211203	Hikvision	INDIA
36	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073443	172.16.15.104	DS-2CD4C36FWD-AP	General surveillance	Indroda	ICCC	V5.7.1 build 211203	Hikvision	INDIA
37	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073373	172.16.15.105	DS-2CD4C36FWD-AP	General surveillance	Indroda	ICCC	V5.7.1 build 211203	Hikvision	INDIA
38	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073436	172.16.15.106	DS-2CD4C36FWD-AP	General surveillance	Indroda	ICCC	V5.7.1 build 211203	Hikvision	INDIA
39	N/A	DS-2DE7232IW-AE20211104AAWRG94013648	172.16.15.107	DS-2CD4C36FWD-AP	General surveillance	Indroda	ICCC	V5.7.1 build 211203	Hikvision	INDIA
40	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073324	172.16.15.108	DS-2CD4C36FWD-AP	General surveillance	New Sargasan-1	ICCC	V5.7.1 build 211203	Hikvision	INDIA
41	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073343	172.16.15.109	DS-2CD4C36FWD-AP	General surveillance	New Sargasan-1	ICCC	V5.7.1 build 211203	Hikvision	INDIA
42	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073414	172.16.15.110	DS-2CD4C36FWD-AP	General surveillance	New Sargasan-1	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
43	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073415	172.16.15.111	DS-2CD4C36FWD-AP	General surveillance	New Sargasan-2	ICCC	V5.7.1 build 211203	Hikvision	INDIA
44	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073382	172.16.15.112	DS-2CD4C36FWD-AP	General surveillance	New Sargasan-2	ICCC	V5.7.1 build 211203	Hikvision	INDIA
45	N/A	NA	172.16.15.113	DS-2CD4C36FWD-AP	General surveillance	New Sargasan-2	ICCC	V5.7.1 build 211203	Hikvision	INDIA
46	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073490	172.16.15.114	DS-2CD4C36FWD-AP	General surveillance	New Kudasan, Near Prominate Hotel	ICCC	V5.7.1 build 211203	Hikvision	INDIA
47	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073423	172.16.15.115	DS-2CD4C36FWD-AP	General surveillance	New Kudasan, Near Prominate Hotel	ICCC	V5.7.1 build 211203	Hikvision	INDIA
48	N/A	DS-2DE7232IW-AE20211104AAWRG94013565	172.16.15.116	DS-2CD4C36FWD-AP	General surveillance	New Kudasan, Near Prominate Hotel	ICCC	V5.7.1 build 211203	Hikvision	INDIA
49	N/A	DS-2CD4C36FWD-AP20220107AAWRG94013607	172.16.15.117	DS-2CD4C36FWD-AP	General surveillance	New Kudasan, Near Prominate Hotel	ICCC	V5.7.1 build 211203	Hikvision	INDIA
50	N/A	DS-2DE7232IW-AE20211104AAWRG94013688	172.16.15.118	DS-2CD4C36FWD-AP	General surveillance	Palaj	ICCC	V5.7.1 build 211203	Hikvision	INDIA
51	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073332	172.16.15.119	DS-2CD4C36FWD-AP	General surveillance	Palaj	ICCC	V5.7.1 build 211203	Hikvision	INDIA
52	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073514	172.16.15.120	DS-2CD4C36FWD-AP	General surveillance	Palaj	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
53	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073499	172.16.15.121	DS-2CD4C36FWD-AP	General surveillance	Palaj	ICCC	V5.7.1 build 211203	Hikvision	INDIA
54	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073324	172.16.15.122	DS-2CD4C36FWD-AP	General surveillance	Palaj	ICCC	V5.7.1 build 211203	Hikvision	INDIA
55	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073343	172.16.15.123	DS-2CD4C36FWD-AP	General surveillance	Between GEB croassroad to Pethapur crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
56	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073414	172.16.15.124	DS-2CD4C36FWD-AP	General surveillance	Between GEB croassroad to Pethapur crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
57	N/A	DS-2DE7232IW-AE20211104AAWRG94013607	172.16.15.125	DS-2CD4C36FWD-AP	General surveillance	Between GEB croassroad to Pethapur crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
58	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073503	172.16.15.126	DS-2CD4C36FWD-AP	General surveillance	Between GEB croassroad to Pethapur crossroad	ICCC	V5.7.1 build 211203	Hikvision	INDIA
59	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073348	172.16.15.127	DS-2CD4C36FWD-AP	General surveillance	Pethapur Market	ICCC	V5.7.1 build 211203	Hikvision	INDIA
60	N/A	DS-2DE7232IW-AE20211104AAWRG94013564	172.16.15.128	DS-2CD4C36FWD-AP	General surveillance	Pethapur Market	ICCC	V5.7.1 build 211203	Hikvision	INDIA
61	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073394	172.16.15.129	DS-2CD4C36FWD-AP	General surveillance	K4 (Beside Hotel Lila)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
62	N/A	DS-2CD4C36FWD-AP20220107	172.16.15.130	DS-2CD4C36FWD-AP	General surveillance	K4 (Beside Hotel Lila)	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AAWRJ29073456								
63	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073430	172.16.15.131	DS-2CD4C36FWD-AP	General surveillance	K4 (Beside Hotel Lila)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
64	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073496	172.16.15.132	DS-2CD4C36FWD-AP	General surveillance	Kudasan-3(Opp. Vrundavan Hotel)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
65	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073481	172.16.15.133	DS-2CD4C36FWD-AP	General surveillance	Kudasan-3(Opp. Vrundavan Hotel)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
66	N/A	DS-2CD4C36FWD-AP20220107AAWRG94013671	172.16.15.134	DS-2CD4C36FWD-AP	General surveillance	Kudasan-3(Opp. Vrundavan Hotel)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
67	N/A	DS-2CD4C36FWD-AP20220107AAWRG94013589	172.16.15.161	DS-2CD4C36FWD-AP	General surveillance	Kudasan Near Legends of Punjab Hotel(Apna Adda)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
68	N/A	DS-2CD4C36FWD-AP20220107AAWRG94013614	172.16.15.162	DS-2CD4C36FWD-AP	General surveillance	Kudasan Near Legends of Punjab Hotel(Apna Adda)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
69	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073366	172.16.15.163	DS-2CD4C36FWD-AP	General surveillance	G-0 Near RTO	ICCC	V5.7.1 build 211203	Hikvision	INDIA
70	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073473	172.16.15.164	DS-2CD4C36FWD-AP	General surveillance	G-0 Near RTO	ICCC	V5.7.1 build 211203	Hikvision	INDIA
71	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073522	172.16.15.170	DS-2CD4C36FWD-AP	General surveillance	Sargasan Villlage Entry	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
72	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073452	172.16.15.171	DS-2CD4C36FWD-AP	General surveillance	Sargasan Villlage Entry	ICCC	V5.7.1 build 211203	Hikvision	INDIA
73	N/A	DS-2DE7232IW-AE20211104AAWRG94013613	172.16.15.180	DS-2CD4C36FWD-AP	General surveillance	Vavol Square Near Mandir	ICCC	V5.7.1 build 211203	Hikvision	INDIA
74	N/A	DS-2DE7232IW-AE20211104AAWRG94013560	172.16.15.181	DS-2CD4C36FWD-AP	General surveillance	Vavol Square Near Mandir	ICCC	V5.7.1 build 211203	Hikvision	INDIA
75	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073362	172.16.15.182	DS-2CD4C36FWD-AP	General surveillance	Vavol Square Near Mandir	ICCC	V5.7.1 build 211203	Hikvision	INDIA
76	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073445	172.16.15.183	DS-2CD4C36FWD-AP	General surveillance	Vavol Square Near Mandir	ICCC	V5.7.1 build 211203	Hikvision	INDIA
77	N/A	DS-2DE7232IW-AE20211104AAWRG94013627	10.43.3.51	DS-2CD4C36FWD-AP	General surveillance	Bhat	ICCC	V5.7.1 build 211203	Hikvision	INDIA
78	N/A	DS-2DE7232IW-AE20211104AAWRG94013671	10.43.3.52	DS-2CD4C36FWD-AP	General surveillance	Bhat	ICCC	V5.7.1 build 211203	Hikvision	INDIA
79	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073496	10.43.3.53	DS-2CD4C36FWD-AP	General surveillance	Bhat	ICCC	V5.7.1 build 211203	Hikvision	INDIA
80	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073481	10.43.3.54	DS-2CD4C36FWD-AP	General surveillance	Bhat	ICCC	V5.7.1 build 211203	Hikvision	INDIA
81	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073358	10.43.3.3	DS-2CD4C36FWD-AP	General surveillance	Koteshwar	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
82	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073501	10.43.3.4	DS-2CD4C36FWD-AP	General surveillance	Koteshwar	ICCC	V5.7.1 build 211203	Hikvision	INDIA
83	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073397	10.43.3.5	DS-2CD4C36FWD-AP	General surveillance	Koteshwar	ICCC	V5.7.1 build 211203	Hikvision	INDIA
84	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073415	10.43.3.67	DS-2CD4C36FWD-AP	General surveillance	Ambapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
85	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073382	10.43.3.68	DS-2CD4C36FWD-AP	General surveillance	Ambapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
86	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073369	10.43.3.69	DS-2CD4C36FWD-AP	General surveillance	Ambapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
87	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073490	10.43.3.70	DS-2CD4C36FWD-AP	General surveillance	Ambapur	ICCC	V5.7.1 build 211203	Hikvision	INDIA
88	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073435	10.43.3.148	DS-2CD4C36FWD-AP	General surveillance	Zundal Narmada Canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
89	N/A	DS-2DE7232IW-AE20211104AAWRG94013568	10.43.3.149	DS-2CD4C36FWD-AP	General surveillance	Zundal Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
90	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073433	10.43.3.150	DS-2CD4C36FWD-AP	General surveillance	Zundal Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
91	N/A	DS-2DE7232IW-AE20210507	10.43.3.151	DS-2CD4C36F	Gen eral surv	Zundal Narmada canal	ICCC	V5.7.1 build 211203	Hik visi on	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AAWRF94809275		WD-AP	eillance					
92	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073535	10.43.3.152	DS-2CD4C36FWD-AP	General surveillance	Zundal Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
93	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073462	10.43.3.153	DS-2CD4C36FWD-AP	General surveillance	Zundal Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
94	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073451	10.43.3.101	DS-2CD4C36FWD-AP	General surveillance	Sughad Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
95	N/A	DS-2DE7232IW-AE20211104AAWRG94013672	10.43.3.102	DS-2CD4C36FWD-AP	General surveillance	Sughad Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
96	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073441	10.43.3.103	DS-2CD4C36FWD-AP	General surveillance	Sughad Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
97	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073355	10.43.3.104	DS-2CD4C36FWD-AP	General surveillance	Sughad Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
98	N/A	DS-2DE7232IW-AE20211104AAWRG94013589	10.43.3.105	DS-2CD4C36FWD-AP	General surveillance	Sughad Narmada canal	ICCC	V5.7.1 build 211203	Hikvision	INDIA
99	N/A	DS-2DE7232IW-AE20211104AAWRG94013614	10.43.3.84	DS-2CD4C36FWD-AP	General surveillance	Koba Circle to Apollo Canal Bridge	ICCC	V5.7.1 build 211203	Hikvision	INDIA
100	N/A	DS-2DE7232IW-AE20210507AAWRF94809331	10.43.3.85	DS-2CD4C36FWD-AP	General surveillance	Koba Circle to Apollo Canal Bridge	ICCC	V5.7.1 build 211203	Hikvision	INDIA
101	N/A	DS-2CD4C36FWD-AP20220107	10.43.3.86	DS-2CD4C36FWD-AP	General surveillance	Koba Circle to Apollo Canal Bridge	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
		AAWRJ29073519								
102	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073533	10.43.3.87	DS-2CD4C36FWD-AP	General surveillance	Koba Circle to Apollo Canal Bridge	ICCC	V5.7.1 build 211203	Hikvision	INDIA
103	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073489	10.43.3.88	DS-2CD4C36FWD-AP	General surveillance	Koba Circle to Apollo Canal Bridge	ICCC	V5.7.1 build 211203	Hikvision	INDIA
104	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073487	10.43.3.89	DS-2CD4C36FWD-AP	General surveillance	Koba Circle to Apollo Canal Bridge	ICCC	V5.7.1 build 211203	Hikvision	INDIA
105	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073438	10.43.3.19	DS-2CD4C36FWD-AP	General surveillance	Near Koba Lake	ICCC	V5.7.1 build 211203	Hikvision	INDIA
106	N/A	DS-2DE7232IW-AE20211104AAWRG94013638	10.43.3.20	DS-2CD4C36FWD-AP	General surveillance	Near Koba Lake	ICCC	V5.7.1 build 211203	Hikvision	INDIA
107	N/A	DS-2DE7232IW-AE20211104AAWRG94013596	10.43.3.21	DS-2CD4C36FWD-AP	General surveillance	Near Koba Lake	ICCC	V5.7.1 build 211203	Hikvision	INDIA
108	N/A	DS-2DE7232IW-AE20211104AAWRG94013658	10.43.3.22	DS-2CD4C36FWD-AP	General surveillance	Near Koba Lake	ICCC	V5.7.1 build 211203	Hikvision	INDIA
109	N/A	DS-2DE7232IW-AE20211104AAWRG94013559	10.43.3.23	DS-2CD4C36FWD-AP	General surveillance	Near Koba Lake	ICCC	V5.7.1 build 211203	Hikvision	INDIA
110	N/A	DS-2DE7232IW-AE20211104AAWRG94013559	10.43.3.35	DS-2CD4C36FWD-AP	General surveillance	Zundal Near Gate 2	ICCC	V5.7.1 build 211203	Hikvision	INDIA
111	N/A	DS-2DE7232IW-AE20211104AAWRG94013592	10.43.3.36	DS-2CD4C36FWD-AP	General surveillance	Zundal Near Gate 2	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
112	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073365	10.43.3.132	DS-2CD4C36FWD-AP	General surveillance	Adalaj Cannal(S G highway Cannal)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
113	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073360	10.43.3.133	DS-2CD4C36FWD-AP	General surveillance	Adalaj Cannal(S G highway Cannal)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
114	N/A	DS-2DE7232IW-AE20211104AAWRG94013563	10.43.3.134	DS-2CD4C36FWD-AP	General surveillance	Adalaj Cannal(S G highway Cannal)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
115	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073521	10.43.3.135	DS-2CD4C36FWD-AP	General surveillance	Adalaj Cannal(S G highway Cannal)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
116	N/A	DS-2CD4C36FWD-AP20220107AAWRJ29073449	10.43.3.136	DS-2CD4C36FWD-AP	General surveillance	Adalaj Cannal(S G highway Cannal)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
117	N/A	DS-2DE7232IW-AE20210507AAWRF94809295	10.43.3.137	DS-2CD4C36FWD-AP	General surveillance	Adalaj Cannal(S G highway Cannal)	ICCC	V5.7.1 build 211203	Hikvision	INDIA
118	NA	210235T4UF3176000009	172.16.5.241	SIP-20EH4W-BO2	General surveillance	GMC_First_Floor_Cam-1	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
119	NA	210235T4UF3176000006	172.16.5.242	SIP-20EH4W-BO2	General surveillance	GMC_First_Floor_Cam-2	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
120	NA	210235T4UF3176000008	172.16.5.243	SIP-20EH4W-BO2	General surveillance	GMC_First_Floor_Cam-3	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
121	NA	210235T4UF3176000003	172.16.5.245	SIP-20EH4W-BO2	General surveillance	GMC_First_Floor_Cam-5	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
122	NA	210235T4UF3176000013	172.16.5.246	SIP-20EH4	General surv	GMC_First_Floor_Cam-6	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
				W-BO2	eillance					
123	NA	210235T9RN318B000132	172.16.5.252	SIP-20EH4W-BO2	General surveillance	Second_Floor_Adharcard_Coridoor	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
124	NA	210235T9RN318B000109	172.16.5.250	SIP-20EH4W-BO2	General surveillance	Second_Floor_Administrative-Step	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
125	NA	210235T9RN318B000101	172.16.5.253	SIP-20EH4W-BO2	General surveillance	Second_Floor_Coridor-rangmanch-Office	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
126	NA	0190EA02F0	172.16.5.247	SIP-20EH4W-BO2	General surveillance	SWM Weigh_Bridge Camera	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
127	NA	210235T9RN318B000102	172.16.5.236	SIP-EB201	General surveillance	Sec-20 Rangmanch Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
128	NA	210235T9RN318B000196	172.16.5.237	SIP-EB201	General surveillance	Sec-20 Rangmanch Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
129	NA	210235T9RN318B000157	172.16.5.238	SIP-EB201	General surveillance	Sec-20 Rangmanch Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
130	NA	210235T8RQ3188000079	172.16.5.239	SIP-EB201	General surveillance	Sec-20 Rangmanch Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
131	NA	210235T9RN3188000149	172.16.5.175	SIP-EB201	General surveillance	Sec-16 Rangmanch Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
132	NA	210235T8RQ3188000033	172.16.5.176	SIP-EB201	General surveillance	Sec-16 Rangmanch Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
133	NA	210235T9RN318B000178	172.16.5.177	SIP-EB201	General surveillance	Sec-16 Rangmanch Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
134	NA	210235T9RN318B000189	172.16.5.178	SIP-EB201	General surveillance	Sec-22 Rangmanch Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
135	NA	210235T9RN318B000182	172.16.5.179	SIP-EB201	General surveillance	Sec-22 Rangmanch Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
136	NA	210235T9RN318B000146	172.16.5.180	SIP-EB201	General surveillance	Sec-22 Rangmanch Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
137	NA	210235T9RN318B000129	172.16.5.181	SIP-EB201	General surveillance	Sec-22 Rangmanch Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
138	NA	210235T8RQ3188000103	172.16.5.182	SIP-EB201	General surveillance	Sec-22 Rangmanch Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
139	NA	210235T8RQ3188000080	172.16.5.183	SIP-EB201	General surveillance	Sec-28 Rangmanch Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
140	NA	210235T9RN318B000139	172.16.5.184	SIP-EB201	General surveillance	Sec-28 Rangmanch Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
141	NA	210235T9RN318B000108	172.16.5.185	SIP-EB201	General surveillance	Sec-28 Rangmanch Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
142	NA	210235T9RN318B000172	172.16.5.186	SIP-EB201	General surveillance	Sec-28 Rangmanch Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
143	NA	210235T9RN318B000112	172.16.5.187	SIP-EB201	General surveillance	Sec-28 Rangmanch Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
144	NA	210235T8RQ3188000061	172.16.5.188	SIP-EB201	General surveillance	Sec-29 Rangmanch Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
145	NA	210235T9RN318B000166	172.16.5.189	SIP-EB201	General surveillance	Sec-29 Rangmanch Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
146	NA	210235T9RN318B000191	172.16.5.190	SIP-EB201	General surveillance	Sec-29 Rangmanch Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
147	NA	210235T9RN318B000141	172.16.5.191	SIP-EB201	General surveillance	Sec-29 Rangmanch Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
148	NA	210235T9RN318B000200	172.16.5.192	SIP-EB201	General surveillance	Sec-29 Rangmanch Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
149	NA	210235T9RN318B000159	172.16.5.193	SIP-EB201	General surveillance	Sec-30 Rangmanch Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
150	NA	210235T9RN318B000170	172.16.5.194	SIP-EB201	General surveillance	Sec-30 Rangmanch Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
151	NA	210235T9RN318B000126	172.16.5.195	SIP-EB201	General surveillance	Sec-30 Rangmanch Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
152	NA	210235T9RN318B000180	172.16.5.196	SIP-EB201	General surveillance	Sec-30 Rangmanch Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
153	NA	210235T8RQ3188000095	172.16.5.197	SIP-EB201	General surveillance	Sec-30 Rangmanch Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
154	NA	210235T8RQ3188000001	172.16.5.198	SIP-EB201	General surveillance	Sec-28 Garden Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
155	NA	210235T8RQ3188000009	172.16.5.199	SIP-EB201	General surveillance	Sec-28 Garden Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
156	NA	210235T8RQ3188000005	172.16.5.200	SIP-EB201	General surveillance	Sec-28 Garden Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
157	NA	210235T8RQ3188000008	172.16.5.201	SIP-EB201	General surveillance	Sec-28 Garden Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
158	NA	210235T8RQ3188000008	172.16.5.202	SIP-EB201	General surveillance	Sec-28 Garden Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
159	NA	210235T9RN318B000190	172.16.5.203	SIP-EB201	General surveillance	Sec-28 Garden Cam-6	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
160	NA	210235T9RN318B000119	172.16.5.204	SIP-EB201	General surveillance	Sec-28 Garden Cam-7	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
161	NA	210235T9RN318B000151	172.16.5.205	SIP-EB201	General surveillance	Sec-28 Garden Cam-8	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
162	NA	210235T9RN318B000138	172.16.5.206	SIP-EB201	General surveillance	Sec-28 Garden Cam-9	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
163	NA	210235T9RN318B000198	172.16.5.207	SIP-EB201	General surveillance	Sec-28 Garden Cam-10	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
164	NA	210235T9RN318B000116	172.16.5.208	SIP-EB201	General surveillance	Sec-28 Garden Cam-11	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
165	NA	210235T9RN318B000164	172.16.5.209	SIP-EB201	General surveillance	Sec-28 Garden Cam-12	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
166	NA	210235T9RN318B000150	172.16.5.210	SIP-EB201	General surveillance	Sec-28 Garden Cam-13	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
167	NA	210235T9RN318B000174	172.16.5.211	SIP-EB201	General surveillance	Sec-28 Garden Cam-14	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
168	NA	210235T9RN318B000187	172.16.5.212	SIP-EB201	General surveillance	Sec-28 Garden Cam-15	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
169	NA	210235T9RN318B000120	172.16.5.213	SIP-EB201	General surveillance	Sec-28 Garden Cam-16	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
170	NA	210235T9RN318B000121	172.16.5.214	SIP-EB201	General surveillance	Sec-28 Garden Cam-17	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
171	NA	210235T9RN318B000105	172.16.5.215	SIP-EB201	General surveillance	Sec-28 Garden Cam-18	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
172	NA	210235T9RN318B000118	172.16.5.216	SIP-EB201	General surveillance	Sec-28 Garden Cam-19	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
173	NA	210235T9RN318B000188	172.16.5.217	SIP-EB201	General surveillance	Sec-28 Garden Cam-20	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
174	NA	210235T8RQ3188000077	172.16.5.218	SIP-EB201	General surveillance	Sarita Udhyan Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
175	NA	210235T8RQ3188000060	172.16.5.219	SIP-EB201	General surveillance	Sarita Udhyan Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
176	NA	210235T8RQ3188000038	172.16.5.220	SIP-EB201	General surveillance	Sarita Udhyan Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
177	NA	210235T8RQ3188000076	172.16.5.221	SIP-EB201	General surveillance	Sarita Udhyan Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
178	NA	210235T8RQ3188000077	172.16.5.222	SIP-EB201	General surveillance	Sarita Udhyan Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
179	NA	210235T8RQ3188000060	172.16.5.223	SIP-EB201	General surveillance	Sarita Udhyan Cam-6	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
180	NA	210235T8RQ3188000016	172.16.5.224	SIP-EB201	General surveillance	Sarita Udhyan Cam-7	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
181	NA	210235T8RQ3188000007	172.16.5.225	SIP-EB201	General surveillance	Sarita Udhyan Cam-8	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
182	NA	210235T8RQ3188000002	172.16.5.226	SIP-EB201	General surveillance	Sarita Udhyan Cam-9	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
183	NA	210235T8RQ3188000101	172.16.5.227	SIP-EB201	General surveillance	Sec-7 Garden Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
184	NA	210235T9RN318B000148	172.16.5.228	SIP-EB201	General surveillance	Sec-7 Garden Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
185	NA	210235T9RN318B000147	172.16.5.229	SIP-EB201	General surveillance	Sec-7 Garden Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
186	NA	210235T9RN318B000137	172.16.5.230	SIP-EB201	General surveillance	Sec-24 Garden Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
187	NA	210235T9RN318B000171	172.16.5.231	SIP-EB201	General surveillance	Sec-24 Garden Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
188	NA	210235T8RQ3188000087	172.16.5.232	SIP-EB201	General surveillance	Sec-24 Garden Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
189	NA	210235T8RQ3188000057	172.16.5.233	SIP-EB201	General surveillance	Sec-27 Garden Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
190	NA	210235T9RN318B000158	172.16.5.234	SIP-EB201	General surveillance	Sec-27 Garden Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
191	NA	210235T8RQ3188000101	172.16.5.235	SIP-EB201	General surveillance	Sec-27 Garden Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
192	NA	A0210325T9RN318B000176	172.16.5.41	SIP-EB201	General surveillance	GMC Ground_floor Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
193	NA	A0210325T9RN318B000153	172.16.5.42	SIP-EB201	General surveillance	GMC Ground_floor Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
194	NA	A0210325T9RN318B000103	172.16.5.43	SIP-EB201	General surveillance	GMC Ground_floor Cam-3	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
195	NA	A0210325T9RN318B000117	172.16.5.44	SIP-EB201	General surveillance	GMC Ground_floor Cam-4	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
196	NA	A0210325T9RN318B000163	172.16.5.45	SIP-EB201	General surveillance	GMC Ground_floor Cam-5	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
197	NA	A0210325T9RN318B000127	172.16.5.48	SIP-EB201	General surveillance	GMC Second floor Cam-1	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
198	NA	A0210325T9RN318B000130	172.16.5.49	SIP-EB201	General surveillance	GMC Second floor Cam-2	ICCC	IPC_HCMN2108-B0008P10D1806C20	Secura	INDIA
199	NA	210235T4UF3176000002	172.16.9.51	SIP-20EH4W-BO2	Camera	New GMC 3rd floor PA to Deputy Comm.	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
200	NA	210235T9RN318B000131	172.16.9.52	SIP-EB201	Camera	New GMC 3rd floor left passage-2	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
201	NA	210235T9RN318B000194	172.16.9.53	SIP-EB201	Camera	New GMC 3rd floor lift area	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
202	NA	210235T9RN318B000123	172.16.9.54	SIP-EB201	Camera	New GMC 3rd floor stair right side	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
203	NA	210235T4UF3176000007	172.16.9.55	SIP-20EH4W-BO2	Camera	New GMC 3rd floor stair left side	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
204	NA	210235T9RN318B000197	172.16.9.56	SIP-EB201	Camera	New GMC 3rd floor left passage-1	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
205	NA	210235T9RN318B000184	172.16.9.57	SIP-EB201	Camera	New GMC 3rd floor left corner-2	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
206	NA	210235T9RN318B000156	172.16.9.58	SIP-EB201	Camera	New GMC 3rd floor left corner-1	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
207	NA	210235T9RN318B000113	172.16.9.59	SIP-EB201	Camera	New GMC 3rd floor Right passage-2	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
208	NA	210235T9RN318B000167	172.16.9.60	SIP-EB201	Camera	New GMC 3rd floor commissioner cabin passage	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
209	NA	210235T9RN318B000155	172.16.9.61	SIP-EB201	Camera	New GMC 2rd Floor Lift Area	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
210	NA	210235T4UF3176000020	172.16.9.62	SIP-20EH4W-BO2	Camera	New GMC 2rd Floor Left Side Passage-1	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
211	NA	210235T9RN318B000111	172.16.9.63	SIP-EB201	Camera	New GMC 2rd Floor Right Side Passage-1	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
212	NA	210235T4UF3176000015	172.16.9.64	SIP-20EH4W-BO2	Camera	New GMC 2rd Floor Left Stair	ICCC	IPC_HCMN2108-B0002P20D1702	Secura	INDIA
213	NA	210235T9RN318B000133	172.16.9.65	SIP-EB201	Camera	New GMC 2rd Floor Right Stair	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
214	NA	210235T9RN318B000134	172.16.9.66	SIP-EB201	Camera	New GMC 2rd Floor Hishabi Shakha	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
215	NA	210235T9RN318B000125	172.16.9.67	SIP-EB201	Camera	New GMC 2rd Floor Right Side Passage-2	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
216	NA	210235T9RN318B000160	172.16.9.68	SIP-EB201	Camera	New GMC 2rd Floor Left Side Passage-2	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
217	NA	210235T9RN318B000135	172.16.9.69	SIP-EB201	Camera	New GMC 2rd Floor Waiting Area	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
218	NA	210235T9RN318B000124	172.16.9.70	SIP-EB201	Camera	New GMC 1st Floor Right Side Passage-1	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
219	NA	210235T9RN318B000175	172.16.9.71	SIP-EB201	Camera	New GMC 1st Floor Smart City Passage	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
220	NA	210235T9RN318B000104	172.16.9.72	SIP-EB201	Camera	New GMC 1st Floor Stair Left	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
221	NA	210235T9RN318B000136	172.16.9.73	SIP-EB201	Camera	New GMC 1st Floor Stair Right	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
222	NA	210235T9RN318B000114	172.16.9.74	SIP-EB201	Camera	New GMC 1st Floor Sanitation Passage	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
223	NA	210235T9RN318B000152	172.16.9.75	SIP-EB201	Camera	New GMC 1st Floor Right Side Passage-2	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
224	NA	210235T9RN318B000128	172.16.9.76	SIP-EB201	Camera	New GMC 1st Floor Lift Side	ICCC	PC_HCMN2108-B0008P10D1806C20	Secura	INDIA
225	NA	AP20220107AAWRJ29073501	172.16.9.77	DS-2CD4C36FWD-AP	Camera	New GMC Entry Gate Lift Area	ICCC	V5.7.1 build 211203	Hikvision	INDIA
226	NA	AP20220107AAWRJ29073490	172.16.9.78	DS-2CD4C36FWD-AP	Camera	New GMC Right Side Parking Cam-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
227	NA	AP20220107AAWRJ29073431	172.16.9.79	DS-2CD4C36FWD-AP	Camera	New GMC Right Side Parking Cam-1	ICCC	V5.7.1 build 211203	Hikvision	INDIA
228	NA	AP20220107AAWRJ29073319	172.16.9.80	DS-2CD4C36FWD-AP	Camera	New GMC Right Side Parking Cam-2	ICCC	V5.7.1 build 211203	Hikvision	INDIA
229	NA	AP20220107AAWRJ29073409	172.16.9.81	DS-2CD4C36FWD-AP	Camera	New GMC Right Side Parking Cam-3	ICCC	V5.7.1 build 211203	Hikvision	INDIA
230	NA	AP20220107AAWRJ29073369	172.16.9.82	DS-2CD4C36FWD-AP	Camera	New GMC Right Side Parking Cam-4	ICCC	V5.7.1 build 211203	Hikvision	INDIA
231	NA	AP20220107AAWRJ29073497	172.16.9.83	DS-2CD4C36FWD-AP	Camera	New GMC Right Side Parking Cam-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
232	NA	AP20200817AAWRE69827160	172.16.9.84	DS-2CD5026G0-AP	Camera	New GMC Entry Gate	ICCC	V5.7.1 build 211203	Hikvision	INDIA
233	NA	AP20220107AAWRJ29073384	172.16.9.85	DS-2CD4C36FWD-AP	Camera	New GMC Left Side Parking Cam-5	ICCC	V5.7.1 build 211203	Hikvision	INDIA
234	NA	AP20220107AAWRJ29073313	172.16.9.86	DS-2CD4C36FWD-AP	Camera	New GMC Left Side Parking Cam-4	ICCC	V5.7.1 build 211203	Hikvision	INDIA
235	NA	AP20200817AAWRE69827203	172.16.9.87	DS-2CD5026G0-AP	Camera	New GMC Left Side Parking Cam-3	ICCC	V5.7.1 build 211203	Hikvision	INDIA
236	NA	AP20200817AAWRE69827188	172.16.9.88	DS-2CD5026G0-AP	Camera	New GMC Left Side Parking Cam-2	ICCC	V5.7.1 build 211203	Hikvision	INDIA
237	NA	AP20200817AAWRE69827184	172.16.9.89	DS-2CD5026G0-AP	Camera	New GMC Left Side Parking Cam-1	ICCC	V5.7.1 build 211203	Hikvision	INDIA
238	NA	AP20200817AAWRE69827144	172.16.9.90	DS-2CD5026G0-AP	Camera	New GMC Left Side Parking Cam-6	ICCC	V5.7.1 build 211203	Hikvision	INDIA
239	NA	AP20220107AAWRJ29073393	172.16.9.91	DS-2CD4C36FWD-AP	Camera	New GMC Front Exit	ICCC	V5.7.1 build 211203	Hikvision	INDIA
240	NA	AP20200817AAWRE69827198	172.16.9.92	DS-2CD5026G0-AP	Camera	New GMC Front Entry	ICCC	V5.7.1 build 211203	Hikvision	INDIA
241	NA	AP20200817AAWRE69827169	172.16.9.93	DS-2CD5026G0-AP	Camera	New GMC Main Exit Gate	ICCC	V5.7.1 build 211203	Hikvision	INDIA
242	NA	AP20220107AAWRJ29073405	172.16.9.94	DS-2CD4C36FWD-AP	Camera	New GMC Main Entry Gate	ICCC	V5.7.1 build 211203	Hikvision	INDIA
243	NA	210235T6D7317B000004	172.16.9.95	SIP-20SH5336W-P5S	PTZ Camera	New GMC 1st Floor Waiting Area PTZ-1	ICCC	IPC_HCMN2103-B0019P11D1708C03	Secura	INDIA
244	NA	210235T8RQ3188000037	172.16.9.96	SIP-ESPD203S	PTZ Camera	New GMC 1st Floor Waiting Area PTZ-2	ICCC	IPC_HCMN2103-B0021P12D1803C10	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
245	NA	210235T8RQ3188000071	172.16.6.51	SIP-20SH5336W-P5S	PTZ Camera	CH-3	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
246	NA	210235T7633183000014	172.16.6.55	SIP-20SH5336W-P5S	PTZ Camera	G-2	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
247	NA	210235T7633183000019	172.16.6.52	SIP-20SH5336W-P5S	PTZ Camera	KH-1	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
248	NA	210235T7633183000022	172.16.6.53	SIP-20SH5336W-P5S	PTZ Camera	KH-2	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
249	NA	210235T7633183000018	172.16.6.54	SIP-20SH5336W-P5S	PTZ Camera	KH-6	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
250	NA	210235T8RQ3188000042	172.16.6.75	SIP-20SH5336W-P5S	PTZ Camera	KH-0(Sargasan)	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
251	NA	210235T8RQ3188000109	172.16.6.57	SIP-20SH5336W-P5S	PTZ Camera	K-6	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
252	NA	210235T8RQ3188000089	172.16.6.58	SIP-20SH5336W-P5S	PTZ Camera	K-7	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
253	NA	210235T8RQ3188000090	172.16.6.59	SIP-20SH5336W-P5S	PTZ Camera	GH-6	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
254	NA	210235T8RQ3188000065	172.16.6.61	SIP-20SH5336W-P5S	PTZ Camera	CHH-6	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
255	NA	210235T8RQ3188000053	172.16.6.62	SIP-20SH5336W-P5S	PTZ Camera	CHH-4A	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
256	NA	210235T8RQ3188000050	172.16.6.63	SIP-20SH5336W-P5S	PTZ Camera	Sector-1 Garden	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
257	NA	210235T8RQ3188000072	172.16.6.64	SIP-20SH5336W-P5S	PTZ Camera	Old Sachivalay Main Gate	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
258	NA	210235T8RQ3188000093	172.16.6.65	SIP-20SH5336W-P5S	PTZ Camera	KH-5	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
259	NA	210235T8RQ3188000100	172.16.6.66	SIP-20SH5336W-P5S	PTZ Camera	GH-1	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
260	NA	210235T8RQ3188000024	172.16.6.67	SIP-20SH5336W-P5S	PTZ Camera	GH-3	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
261	NA	210235T8RQ3188000021	172.16.6.68	SIP-20SH5336W-P5S	PTZ Camera	Civil Hospital	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
262	NA	210235T8RQ3188000094	172.16.6.69	SIP-20SH5336W-P5S	PTZ Camera	Sarita Udhyan	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
263	NA	210235T8RQ3188000081	172.16.6.70	SIP-20SH5336W-P5S	PTZ Camera	Sector 6 Shopping Center	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
264	NA	210235T8RQ3188000058	172.16.6.71	SIP-20SH5336W-P5S	PTZ Camera	Sector 22 Shopping Mall	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
265	NA	210235T8RQ3188000067	172.16.6.72	SIP-20SH5336W-P5S	PTZ Camera	Sector-28 Garden	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
266	NA	210235T8RQ3188000048	172.16.6.74	SIP-20SH5336W-P5S	PTZ Camera	GH-2	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
267	NA	210235T8RQ3188000070	172.16.6.56	SIP-20SH5336W-P5S	PTZ Camera	CH-5	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
268	NA	210235T8RQ3188000073	172.16.6.76	SIP-20SH5336W-P5S	PTZ Camera	CH-6	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
269	NA	210235T8RQ3188000043	172.16.6.77	SIP-20SH5336W-P5S	PTZ Camera	GH-5	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
270	NA	210235T8RQ3188000069	172.16.6.78	SIP-20SH5336W-P5S	PTZ Camera	K-5	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
271	NA	210235T8RQ3188000085	172.16.6.80	SIP-20SH5336W-P5S	PTZ Camera	G-1	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
272	NA	210235T8RQ3188000086	172.16.6.81	SIP-20SH5336W-P5S	PTZ Camera	G-3	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
273	NA	210235T8RQ3188000102	172.16.6.82	SIP-20SH5336W-P5S	PTZ Camera	G-5	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
274	NA	210235T8RQ3188000047	172.16.6.83	SIP-20SH5336W-P5S	PTZ Camera	G-6	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
275	NA	210235T8RQ3188000036	172.16.6.79	SIP-20SH5336W-P5S	PTZ Camera	KH-3	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
276	NA	210235T8RQ3188000004	172.16.6.84	SIP-20SH5336W-P5S	PTZ Camera	Akshardham	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
277	NA	210235T8RQ3188000023	172.16.6.85	SIP-20SH5336W-P5S	PTZ Camera	Indroda Park	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
278	NA	210235T8RQ3188000075	172.16.6.86	SIP-20SH5336W-P5S	PTZ Camera	Infocity	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
279	NA	210235T8RQ3188000096	172.16.6.87	SIP-20SH5336W-P5S	PTZ Camera	Sector -7 Shopping Mall	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
280	NA	210235T8RQ3188000052	172.16.6.11	SIP-20SH5336W-P5S	PTZ Camera	CH-0	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
281	NA	210235T8RQ3188000031	172.16.6.13	SIP-20SH5336W-P5S	PTZ Camera	G-7	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA
282	NA	210235T8RQ3188000055	172.16.6.73	SIP-20SH5336W-P5S	PTZ Camera	Reliance Chokadi	ICCC	IPC_HCMN2103-B0019P31D1708C03	Secura	INDIA

43.3.10 Switch

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	N/A	2022010134	172.16.12.101	TR-IES-2510-P	Network_switch	GEB Colony Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
2	N/A	2022010140	172.16.12.102	TR-IES-2510-P	Network_switch	GEB Colony Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
3	N/A	2022010108	172.16.12.103	TR-IES-2510-P	Network_switch	GEB Colony Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
4	N/A	2022010141	172.16.12.104	TR-IES-2510-P	Network_switch	GEB Colony Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
5	N/A	2022010113	172.16.12.105	TR-IES-2510-P	Network_switch	Pethapur Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
6	N/A	2022010071	172.16.12.106	TR-IES-2510-P	Network_switch	Pethapur Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
7	N/A	2022010070	172.16.12.107	TR-IES-2510-P	Network_switch	Pethapur Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
8	N/A	2022010080	172.16.12.108	TR-IES-2510-P	Network_switch	Pethapur Crossroads	ICCC	1.4.15.705 (build-282)	techroute	INDIA
9	N/A	2022010158	172.16.12.109	TR-IES-2510-P	Network_switch	Randeja Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
10	N/A	2022010181	172.16.12.110	TR-IES-2510-P	Network_switch	Randeja Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
11	N/A	2022010128	172.16.12.111	TR-IES-2510-P	Network_switch	Randeja Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
12	N/A	2022010146	172.16.12.112	TR-IES-2510-P	Network_switch	Randeja Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
13	N/A	2022010153	172.16.12.113	TR-IES-2510-P	Network_switch	K-6	ICCC	1.4.15.705 (build-282)	techroute	INDIA
14	N/A	2022010145	172.16.12.114	TR-IES-2510-P	Network_switch	K-6	ICCC	1.4.15.705 (build-282)	techroute	INDIA
15	N/A	2022010106	172.16.12.115	TR-IES-2510-P	Network_switch	K-6	ICCC	1.4.15.705 (build-282)	techroute	INDIA
16	N/A	2022010178	172.16.12.116	TR-IES-2510-P	Network_switch	K-6	ICCC	1.4.15.705 (build-282)	techroute	INDIA
17	N/A	2022010166	172.16.12.117	TR-IES-2510-P	Network_switch	K-5	ICCC	1.4.15.705 (build-282)	techroute	INDIA
18	N/A	2022010079	172.16.12.118	TR-IES-2510-P	Network_switch	K-5	ICCC	1.4.15.705 (build-282)	techroute	INDIA
19	N/A	2022010170	172.16.12.119	TR-IES-2510-P	Network_switch	K-5	ICCC	1.4.15.705 (build-282)	techroute	INDIA
20	N/A	2022010070	172.16.12.120	TR-IES-2510-P	Network_switch	K-5	ICCC	1.4.15.705 (build-282)	techroute	INDIA
21	N/A	2022010182	172.16.12.121	TR-IES-2510-P	Network_switch	Reliance Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
22	N/A	2022010180	172.16.12.122	TR-IES-2510-P	Network_switch	Reliance Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
23	N/A	016U50300	172.16.12.123	DG-IS4510HPE	Network_switch	Reliance Crossroad	ICCC	2.0.2G Build 99967	DIGISOL	INDIA
24	N/A	20220 10090	172.16.12.124	TR-IES-2510-P	Network_switch	Reliance Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
25	N/A	20220 10111	172.16.12.125	TR-IES-2510-P	Network_switch	K-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
26	N/A	20220 10139	172.16.12.126	TR-IES-2510-P	Network_switch	K-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
27	N/A	20220 10142	172.16.12.127	TR-IES-2510-P	Network_switch	K-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
28	N/A	20220 10109	172.16.12.128	TR-IES-2510-P	Network_switch	K-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
29	N/A	20220 10089	172.16.12.129	TR-IES-2510-P	Network_switch	KH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
30	N/A	20220 10150	172.16.12.130	TR-IES-2510-P	Network_switch	KH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
31	N/A	20220 10063	172.16.12.131	TR-IES-2510-P	Network_switch	KH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
32	N/A	20220 10170	172.16.12.132	TR-IES-2510-P	Network_switch	KH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
33	N/A	20220 10152	172.16.12.133	TR-IES-2510-P	Network_switch	Vasana Hadmathiya (KH-0.5)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
34	N/A	20220 10179	172.16.12.134	TR-IES-2510-P	Network_switch	Vasana Hadmathiya (KH-0.5)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
35	N/A	20220 10094	172.16.12.135	TR-IES-2510-P	Network_switch	Vasana Hadmathiya (KH-0.5)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
36	N/A	20220 10177	172.16.12.136	TR-IES-2510-P	Network_switch	Vasana Hadmathiya (KH-0.5)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
37	N/A	016U5O3000921	172.16.12.137	DG-IS4510HPE	Network_switch	CHH-6	ICCC	2.0.2G Build 99967	DIGISOL	INDIA
38	N/A	20201 20005	172.16.12.138	TR-IES-2510-P	Network_switch	CHH-6	ICCC	1.4.15.705 (build-282)	techroute	INDIA
39	N/A	016U5O3000922	172.16.12.139	DG-IS4510HPE	Network_switch	CHH-6	ICCC	2.0.2G Build 99967	DIGISOL	INDIA
40	N/A	20220 10112	172.16.12.140	TR-IES-2510-P	Network_switch	CHH-6	ICCC	1.4.15.705 (build-282)	techroute	INDIA
41	N/A	20220 10173	172.16.12.141	TR-IES-2510-P	Network_switch	CHH-4A	ICCC	1.4.15.705 (build-282)	techroute	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
42	N/A	2022010126	172.16.12.142	TR-IES-2510-P	Network_switch	CHH-4A	ICCC	1.4.15.705 (build-282)	techroute	INDIA
43	N/A	2022010169	172.16.12.143	TR-IES-2510-P	Network_switch	CHH-4A	ICCC	1.4.15.705 (build-282)	techroute	INDIA
44	N/A	2022010116	172.16.12.144	TR-IES-2510-P	Network_switch	CHH-4A	ICCC	1.4.15.705 (build-282)	techroute	INDIA
45	N/A	2022010147	172.16.12.145	TR-IES-2510-P	Network_switch	KH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
46	N/A	2022010084	172.16.12.146	TR-IES-2510-P	Network_switch	KH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
47	N/A	2022010135	172.16.12.147	TR-IES-2510-P	Network_switch	KH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
48	N/A	2022010066	172.16.12.148	TR-IES-2510-P	Network_switch	KH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
49	N/A	2022010105	172.16.12.149	TR-IES-2510-P	Network_switch	KH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
50	N/A	2022010176	172.16.12.150	TR-IES-2510-P	Network_switch	GH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
51	N/A	2022010059	172.16.12.151	TR-IES-2510-P	Network_switch	GH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
52	N/A	2022010074	172.16.12.152	TR-IES-2510-P	Network_switch	GH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
53	N/A	2022010129	172.16.12.153	TR-IES-2510-P	Network_switch	GH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
54	N/A	2022010107	172.16.12.154	TR-IES-2510-P	Network_switch	GH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
55	N/A	2022010148	172.16.12.155	TR-IES-2510-P	Network_switch	Sarita Udhyan (J-3)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
56	N/A	2022010137	172.16.12.156	TR-IES-2510-P	Network_switch	Sarita Udhyan (J-3)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
57	N/A	2022010162	172.16.12.157	TR-IES-2510-P	Network_switch	Sarita Udhyan (J-3)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
58	N/A	2022010136	172.16.12.158	TR-IES-2510-P	Network_switch	Sarita Udhyan (J-3)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
59	N/A	2022010168	172.16.12.159	TR-IES-2510-P	Network_switch	CH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
60	N/A	2022010132	172.16.12.160	TR-IES-2510-P	Network_switch	CH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
61	N/A	2022010131	172.16.12.161	TR-IES-2510-P	Network_switch	CH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
62	N/A	2022010167	172.16.12.162	TR-IES-2510-P	Network_switch	CH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
63	N/A	2022010124	172.16.12.163	TR-IES-2510-P	Network_switch	G road (G2 to G3)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
64	N/A	2022010097	172.16.12.164	TR-IES-2510-P	Network_switch	KH road (KH-1 to KH-2)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
65	N/A	2022010057	172.16.12.165	TR-IES-2510-P	Network_switch	Uvarsad to Vavol Road	ICCC	1.4.15.705 (build-282)	techroute	INDIA
66	N/A	2022010155	172.16.12.166	TR-IES-2510-P	Network_switch	KH-0 to Reliance	ICCC	1.4.15.705 (build-282)	techroute	INDIA
67	N/A	2022010056	172.16.12.167	TR-IES-2510-P	Network_switch	Gh-0 to Reliance Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
68	N/A	2022010123	172.16.12.168	TR-IES-2510-P	Network_switch	J3 to J4	ICCC	1.4.15.705 (build-282)	techroute	INDIA
69	N/A	2022010058	172.16.12.169	TR-IES-2510-P	Network_switch	GH-7 to CH-7	ICCC	1.4.15.705 (build-282)	techroute	INDIA
70	N/A	2022010077	172.16.12.170	TR-IES-2510-P	Network_switch	CHH-4B to Jill Panchayat	ICCC	1.4.15.705 (build-282)	techroute	INDIA
71	N/A	014Y5M4000229	172.16.12.173	DG-IS4510HPE	Network_switch	Randheja	ICCC	2.0.2G Build 99967	DIGISOL	INDIA
72	N/A	2022010085	172.16.12.174	TR-IES-2510-P	Network_switch	Pethapur	ICCC	1.4.15.705 (build-282)	techroute	INDIA
73	N/A	2022010104	172.16.12.175	TR-IES-2510-P	Network_switch	Vasana Hadmatiya	ICCC	1.4.15.705 (build-282)	techroute	INDIA
74	N/A	2022010171	172.16.12.176	TR-IES-2510-P	Network_switch	Sargasan	ICCC	1.4.15.705 (build-282)	techroute	INDIA
75	N/A	2022010073	172.16.12.177	TR-IES-2510-P	Network_switch	Kolavada	ICCC	1.4.15.705 (build-282)	techroute	INDIA
76	N/A	2022010083	172.16.12.179	TR-IES-2510-P	Network_switch	Por	ICCC	1.4.15.705 (build-282)	techroute	INDIA
77	N/A	2022010086	172.16.12.180	TR-IES-2510-P	Network_switch	Kudasan	ICCC	1.4.15.705 (build-282)	techroute	INDIA
78	N/A	2018100020 1	172.16.12.181	TR-IES-2510-P	Network_switch	Randesan	ICCC	1.4.15.705 (build-282)	techroute	INDIA
79	N/A	2022010157	172.16.12.182	TR-IES-2510-P	Network_switch	Rayasan	ICCC	1.4.15.705 (build-282)	techroute	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
80	N/A	2022010099	10.43.3.50	TR-IES-2510-P	Network_switch	Bhat	ICCC	1.4.15.705 (build-282)	techroute	INDIA
81	N/A	2022010160	10.43.3.2	TR-IES-2510-P	Network_switch	Koteshwar	ICCC	1.4.15.705 (build-282)	techroute	INDIA
82	N/A	2022010156	10.43.3.66	TR-IES-2510-P	Network_switch	Ambapur	ICCC	1.4.15.705 (build-282)	techroute	INDIA
83	N/A	2022010100	172.16.12.186	TR-IES-2510-P	Network_switch	Dholakuva	ICCC	1.4.15.705 (build-282)	techroute	INDIA
84	N/A	2022010121	172.16.12.187	TR-IES-2510-P	Network_switch	Indroda	ICCC	1.4.15.705 (build-282)	techroute	INDIA
85	N/A	2022010122	172.16.12.188	TR-IES-2510-P	Network_switch	New Sargasan-1	ICCC	1.4.15.705 (build-282)	techroute	INDIA
86	N/A	2022010127	172.16.12.189	TR-IES-2510-P	Network_switch	New Sargasan-2	ICCC	1.4.15.705 (build-282)	techroute	INDIA
87	N/A	2022010101	172.16.12.190	TR-IES-2510-P	Network_switch	New Kudasan, Near Prominate Hotel	ICCC	1.4.15.705 (build-282)	techroute	INDIA
88	N/A	2022010120	172.16.12.191	TR-IES-2510-P	Network_switch	Palaj	ICCC	1.4.15.705 (build-282)	techroute	INDIA
89	N/A	2022010185	172.16.12.192	TR-IES-2510-P	Network_switch	Between GEB croassroad to Pethapur crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
90	N/A	2022010112	172.16.12.193	TR-IES-2510-P	Network_switch	Pethapur Market	ICCC	1.4.15.705 (build-282)	techroute	INDIA
91	N/A	2022010138	172.16.12.194	TR-IES-2510-P	Network_switch	K4 (Beside Hotel Lila)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
92	N/A	2022010119	172.16.12.195	TR-IES-2510-P	Network_switch	Kudasan-3(Opp. Vrundavan Hotel)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
93	N/A	2022010159	10.43.3.146	TR-IES-2510-P	Network_switch	Zundal Narmada canal	ICCC	1.4.15.705 (build-282)	techroute	INDIA
94	N/A	2022010110	10.43.3.147	TR-IES-2510-P	Network_switch	Zundal Narmada canal	ICCC	1.4.15.705 (build-282)	techroute	INDIA
95	N/A	2022010125	10.43.3.98	TR-IES-2510-P	Network_switch	Sughad Narmada canal	ICCC	1.4.15.705 (build-282)	techroute	INDIA
96	N/A	2022010102	10.43.3.99	TR-IES-2510-P	Network_switch	Sughad Narmada canal	ICCC	1.4.15.705 (build-282)	techroute	INDIA
97	N/A	2022010092	10.43.3.82	TR-IES-2510-P	Network_switch	Koba Circle to Apollo Canal Bridge	ICCC	1.4.15.705 (build-282)	techroute	INDIA
98	N/A	2022010161	10.43.3.83	TR-IES-2510-P	Network_switch	Koba Circle to Apollo Canal Bridge	ICCC	1.4.15.705 (build-282)	techroute	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
99	N/A	2022010101	172.16.12.206	TR-IES-2510-P	Network_switch	Kudasan Near Legends of Punjab Hotel	ICCC	1.4.15.705 (build-282)	techroute	INDIA
100	N/A	2022010175	172.16.12.207	TR-IES-2510-P	Network_switch	G-0 Near RTO	ICCC	1.4.15.705 (build-282)	techroute	INDIA
101	N/A	2022010154	10.43.3.18	TR-IES-2510-P	Network_switch	Near Koba Lake	ICCC	1.4.15.705 (build-282)	techroute	INDIA
102	N/A	2022010069	172.16.12.209	TR-IES-2510-P	Network_switch	Sargasan Villlage Entry	ICCC	1.4.15.705 (build-282)	techroute	INDIA
103	N/A	2022010164	10.43.3.34	TR-IES-2510-P	Network_switch	Zundal Near Gate 2	ICCC	1.4.15.705 (build-282)	techroute	INDIA
104	N/A	2022010183	10.43.3.130	TR-IES-2510-P	Network_switch	Adalaj Cannal(S G highway Cannal)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
105	N/A	2022010117	10.43.3.131	TR-IES-2510-P	Network_switch	Adalaj Cannal(S G highway Cannal)	ICCC	1.4.15.705 (build-282)	techroute	INDIA
106	N/A	2022010081	172.16.12.213	TR-IES-2510-P	Network_switch	Vavol Square Near Mandir	ICCC	1.4.15.705 (build-282)	techroute	INDIA
107	N/A	2022010087	172.16.12.214	TR-IES-2510-P	Network_switch	Reliance Crossroad	ICCC	1.4.15.705 (build-282)	techroute	INDIA
108	N/A	2019060033	172.16.12.215	TR-IES-2510-P	Network_switch	New ICCC	ICCC	1.4.15.705 (build-282)	techroute	INDIA
109	N/A	2022010062	172.16.12.216	TR-IES-2510-P	Network_switch	KH-0	ICCC	1.4.15.705 (build-282)	techroute	INDIA
110	N/A	2019060056	172.16.12.217	TR-IES-2510-P	Network_switch	Catel House	ICCC	1.1.0.1 (build-4.115)	techroute	INDIA
111	N/A	014Y5M4000223	172.16.12.218	DG-GS1510PL	Network_switch	Catel House	ICCC	4.3.8	DIGISOL	INDIA
112	N/A	2018100026 6	172.16.12.219	TR-IES-2512-P	Network_switch	Catel House	ICCC	1.1.0.1 (build-4.115)	techroute	INDIA
113	N/A	2019060012	172.16.12.220	TR-IES-2512-P	Network_switch	Catel House	ICCC	1.1.0.1 (build-4.115)	techroute	INDIA
114	NA	2019030054	172.16.4.51	TECHROUTE TR-IES-2512-P	Network_switch	g-3 smartpole to atcs	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
115	NA	2018100025 7	172.16.4.54	TECHROUTE TR-IES-2512-P	Network_switch	GMC 4th Floor	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
116	NA	2019060045	172.16.4.55	TECHROUTE TR-IES-2512-P	Network_switch	Akshardham	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
117	NA	2019060056	172.16.4.56	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 B	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
118	NA	2019080020	172.16.4.57	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 B	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
119	NA	201810002117	172.16.4.58	TECHROUTE TR-IES-2512-P	Network_switch	KH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
120	NA	2019060043	172.16.4.59	TECHROUTE TR-IES-2512-P	Network_switch	G-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
121	NA	2019030004	172.16.4.60	TECHROUTE TR-IES-2512-P	Network_switch	KH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
122	NA	2019030029	172.16.4.61	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
123	NA	201810002116	172.16.4.62	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
124	NA	2019030041	172.16.4.63	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
125	NA	2019060044	172.16.4.64	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 B	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
126	NA	2019030040	172.16.4.65	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 B	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
127	NA	201810002118	172.16.4.66	TECHROUTE TR-IES-2512-P	Network_switch	KH-4 B	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
128	NA	2019030019	172.16.4.67	TECHROUTE TR-IES-2512-P	Network_switch	KH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
129	NA	2019030018	172.16.4.68	TECHROUTE TR-IES-2512-P	Network_switch	KH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
130	NA	2019030014	172.16.4.69	TECHROUTE TR-IES-2512-P	Network_switch	KH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
131	NA	2019030025	172.16.4.70	TECHROUTE TR-IES-2512-P	Network_switch	KH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
132	NA	2019030013	172.16.4.71	TECHROUTE TR-IES-2512-P	Network_switch	KH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
133	NA	2019030007	172.16.4.72	TECHROUTE TR-IES-2512-P	Network_switch	KH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
134	NA	2019030028	172.16.4.74	TECHROUTE TR-IES-2512-P	Network_switch	KH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
135	NA	2019060041	172.16.4.75	TECHROUTE TR-IES-2512-P	Network_switch	KH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
136	NA	2019030025	172.16.4.76	TECHROUTE TR-IES-2512-P	Network_switch	G-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
137	NA	2019030030	172.16.4.77	TECHROUTE TR-IES-2512-P	Network_switch	G-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
138	NA	2019030026	172.16.4.78	TECHROUTE TR-IES-2512-P	Network_switch	G-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
139	NA	2019030051	172.16.4.79	TECHROUTE TR-IES-2512-P	Network_switch	G-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
140	NA	2019030050	172.16.4.80	TECHROUTE TR-IES-2512-P	Network_switch	G-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
141	NA	2019060003	172.16.4.81	TECHROUTE TR-IES-2512-P	Network_switch	G-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
142	NA	2019030049	172.16.4.82	TECHROUTE TR-IES-2512-P	Network_switch	G-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
143	NA	2019030053	172.16.4.83	TECHROUTE TR-IES-2512-P	Network_switch	G-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
144	NA	2019060002	172.16.4.84	TECHROUTE TR-IES-2512-P	Network_switch	G-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
145	NA	2019030047	172.16.4.85	TECHROUTE TR-IES-2512-P	Network_switch	G-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
146	NA	2019030046	172.16.4.86	TECHROUTE TR-IES-2512-P	Network_switch	G-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
147	NA	2019030045	172.16.4.87	TECHROUTE TR-IES-2512-P	Network_switch	G-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
148	NA	2019030044	172.16.4.88	TECHROUTE TR-IES-2512-P	Network_switch	Ch-4 A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
149	NA	2019030043	172.16.4.89	TECHROUTE TR-IES-2512-P	Network_switch	Ch-4 A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
150	NA	2019030048	172.16.4.90	TECHROUTE TR-IES-2512-P	Network_switch	Ch-4 A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
151	NA	2019030010	172.16.4.91	TECHROUTE TR-IES-2512-P	Network_switch	Akshardham	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
152	NA	201810002955	172.16.4.92	TECHROUTE TR-IES-2512-P	Network_switch	Akshardham	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
153	NA	2019030059	172.16.4.93	TECHROUTE TR-IES-2512-P	Network_switch	Akshardham	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
154	NA	2019030038	172.16.4.94	TECHROUTE TR-IES-2512-P	Network_switch	KH-5 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
155	NA	2019030005	172.16.4.95	TECHROUTE TR-IES-2512-P	Network_switch	KH-5 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
156	NA	2019030020	172.16.4.96	TECHROUTE TR-IES-2512-P	Network_switch	KH-6 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
157	NA	201810002001	172.16.4.97	TECHROUTE TR-IES-2512-P	Network_switch	KH-6 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
158	NA	2019060032	172.16.4.98	TECHROUTE TR-IES-2512-P	Network_switch	G-6 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
159	NA	2019060030	172.16.4.99	TECHROUTE TR-IES-2512-P	Network_switch	G-6 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
160	NA	2019060001	172.16.4.100	TECHROUTE TR-IES-2512-P	Network_switch	G-5 Circle sw	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
161	NA	2019060031	172.16.4.102	TECHROUTE TR-IES-2512-P	Network_switch	Kh-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
162	NA	201810002245	172.16.4.103	TECHROUTE TR-IES-2512-P	Network_switch	Ch-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
163	NA	201810002246	172.16.4.104	TECHROUTE TR-IES-2512-P	Network_switch	kh-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
164	NA	2018021000 3	172.16.4.106	TECHROUTE TR-IES-2512-P	Network_switch	G-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
165	NA	2019030034	172.16.4.107	TECHROUTE TR-IES-2512-P	Network_switch	G-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
166	NA	201810002253	172.16.4.108	TECHROUTE TR-IES-2512-P	Network_switch	GH-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
167	NA	201810002240	172.16.4.109	TECHROUTE TR-IES-2512-P	Network_switch	GH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
168	NA	201810002299	172.16.4.110	TECHROUTE TR-IES-2512-P	Network_switch	Ch-4b	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
169	NA	2019060031	172.16.4.112	TECHROUTE TR-IES-2512-P	Network_switch	KH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
170	NA	201810002239	172.16.4.115	TECHROUTE TR-IES-2512-P	Network_switch	Ch-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
171	NA	2018100024 1	172.16.4.116	TECHROUTE TR-IES-2512-P	Network_switch	Ch-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
172	NA	2018100029 5	172.16.4.117	TECHROUTE TR-IES-2512-P	Network_switch	Ch-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
173	NA	2019060049	172.16.4.119	TECHROUTE TR-IES-2512-P	Network_switch	NewGMC	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
174	NA	2019060055	172.16.4.120	TECHROUTE TR-IES-2512-P	Network_switch	GH-2.5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
175	NA	2019030058	172.16.4.121	TECHROUTE TR-IES-2512-P	Network_switch	Ch-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
176	NA	2018100028 0	172.16.4.122	TECHROUTE TR-IES-2512-P	Network_switch	Ch-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
177	NA	2018100020 2	172.16.4.123	TECHROUTE TR-IES-2512-P	Network_switch	Ch-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
178	NA	2019030039	172.16.4.124	TECHROUTE TR-IES-2512-P	Network_switch	Ch-3-circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
179	NA	2018021000 1	172.16.4.125	TECHROUTE TR-IES-2512-P	Network_switch	Ch-3-circle-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
180	NA	2019060007	172.16.4.126	TECHROUTE TR-IES-2512-P	Network_switch	GH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
181	NA	2018100029 2	172.16.4.129	TECHROUTE TR-IES-2512-P	Network_switch	GH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
182	NA	2018100028 3	172.16.4.130	TECHROUTE TR-IES-2512-P	Network_switch	GH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
183	NA	2018100020 4	172.16.4.131	TECHROUTE TR-IES-2512-P	Network_switch	Gh-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
184	NA	2019060020	172.16.4.132	TECHROUTE TR-IES-2512-P	Network_switch	Gh-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
185	NA	2018100020 9	172.16.4.133	TECHROUTE TR-IES-2512-P	Network_switch	SWM	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
186	NA	2019060008	172.16.4.134	TECHROUTE TR-IES-2512-P	Network_switch	GH-3 Circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
187	NA	2019030063	172.16.4.136	TECHROUTE TR-IES-2512-P	Network_switch	CH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
188	NA	2018100026 6	172.16.4.137	TECHROUTE TR-IES-2512-P	Network_switch	CH-5 circle sw-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
189	NA	2018100021 4	172.16.4.138	TECHROUTE TR-IES-2512-P	Network_switch	CH-5 circle sw-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
190	NA	2018100026 0	172.16.4.139	TECHROUTE TR-IES-2512-P	Network_switch	GH-2 circle sw-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
191	NA	2019060038	172.16.4.140	TECHROUTE TR-IES-2512-P	Network_switch	GH-2 circle sw-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
192	NA	2018100025 8	172.16.4.141	TECHROUTE TR-IES-2512-P	Network_switch	GH-2 circle sw-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
193	NA	2018100023 4	172.16.4.142	TECHROUTE TR-IES-2512-P	Network_switch	GH-2 circle sw-4	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
194	NA	2018100028 2	172.16.4.151	TECHROUTE TR-IES-2512-P	Network_switch	Between CH-5 to CH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
195	NA	2019060053	172.16.4.152	TECHROUTE TR-IES-2512-P	Network_switch	Between GH-3 to GH-4	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
196	NA	2018100023 0	172.16.4.154	TECHROUTE TR-IES-2512-P	Network_switch	GH-3 Circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
197	NA	2018100025 4	172.16.4.155	TECHROUTE TR-IES-2512-P	Network_switch	GH-3 Circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
198	NA	2019060010	172.16.4.156	TECHROUTE TR-IES-2512-P	Network_switch	Between GH-5 to GH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
199	NA	2018100029 3	172.16.4.157	TECHROUTE TR-IES-2512-P	Network_switch	GH-6 Circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
200	NA	2019030006	172.16.4.158	TECHROUTE TR-IES-2512-P	Network_switch	GH-5 To GH-4 SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
201	NA	2019060039	172.16.4.161	TECHROUTE TR-IES-2512-P	Network_switch	KH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
202	NA	2018100026 4	172.16.4.162	TECHROUTE TR-IES-2512-P	Network_switch	Civil Hospital	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
203	NA	2018100026 2	172.16.4.163	TECHROUTE TR-IES-2512-P	Network_switch	CHH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
204	NA	2018100025 3	172.16.4.164	TECHROUTE TR-IES-2512-P	Network_switch	Old Sachivalay	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
205	NA	2018100026 9	172.16.4.165	TECHROUTE TR-IES-2512-P	Network_switch	KH-0	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
206	NA	2018100021 0	172.16.4.166	TECHROUTE TR-IES-2512-P	Network_switch	GH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
207	NA	201810001999	172.16.4.167	TECHROUTE TR-IES-2512-P	Network_switch	K-7	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
208	NA	201810002220	172.16.4.168	TECHROUTE TR-IES-2512-P	Network_switch	Gh-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
209	NA	201810002219	172.16.4.170	TECHROUTE TR-IES-2512-P	Network_switch	Sector-1 garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
210	NA	2019060048	172.16.4.171	TECHROUTE TR-IES-2512-P	Network_switch	Gh-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
211	NA	2019060004	172.16.4.172	TECHROUTE TR-IES-2512-P	Network_switch	CHH-4A	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
212	NA	201810002522	172.16.4.173	TECHROUTE TR-IES-2512-P	Network_switch	K-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
213	NA	201810002775	172.16.4.174	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
214	NA	201810001996	172.16.4.175	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
215	NA	201810001997	172.16.4.176	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
216	NA	201810002225	172.16.4.177	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
217	NA	201810002889	172.16.4.178	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
218	NA	201810002888	172.16.4.179	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
219	NA	201810002665	172.16.4.180	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
220	NA	201810002559	172.16.4.181	TECHROUTE TR-IES-2512-P	Network_switch	Sarita	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
221	NA	201810002337	172.16.4.182	TECHROUTE TR-IES-2512-P	Network_switch	Sarita	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
222	NA	201810001995	172.16.4.183	TECHROUTE TR-IES-2512-P	Network_switch	Sarita	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
223	NA	201810002778	172.16.4.184	TECHROUTE TR-IES-2512-P	Network_switch	Sarita	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
224	NA	201810002886	172.16.4.185	TECHROUTE TR-IES-2512-P	Network_switch	Sector-7 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
225	NA	201810002911	172.16.4.186	TECHROUTE TR-IES-2512-P	Network_switch	Sector-24 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
226	NA	201810002226	172.16.4.187	TECHROUTE TR-IES-2512-P	Network_switch	Sector-27 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
227	NA	201810002285	172.16.4.188	TECHROUTE TR-IES-2512-P	Network_switch	Sector-16 Rangmanch	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
228	NA	2019030016	172.16.4.189	TECHROUTE TR-IES-2512-P	Network_switch	Sector-20 Rangmanch	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
229	NA	201810002276	172.16.4.190	TECHROUTE TR-IES-2512-P	Network_switch	Sector-22 Rangmanch	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
230	NA	201810002228	172.16.4.191	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Rangmanch	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
231	NA	201810002279	172.16.4.192	TECHROUTE TR-IES-2512-P	Network_switch	Sector-29 Rangmanch	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
232	NA	201810002277	172.16.4.193	TECHROUTE TR-IES-2512-P	Network_switch	Sector-30 Rangmanch	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
233	NA	201810002222	172.16.4.194	TECHROUTE TR-IES-2512-P	Network_switch	Gh-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
234	NA	201810002229	172.16.4.195	TECHROUTE TR-IES-2512-P	Network_switch	Relience Chockdi	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
235	NA	201810002290	172.16.4.196	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
236	NA	201810002273	172.16.4.197	TECHROUTE TR-IES-2512-P	Network_switch	Sector-22 Shopping Mall	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
237	NA	2019060057	172.16.4.198	TECHROUTE TR-IES-2512-P	Network_switch	Sector-6 Shopping mall	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
238	NA	201810002499	172.16.4.199	TECHROUTE TR-IES-2512-P	Network_switch	Sarita Udhyan	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
239	NA	201810002008	172.16.4.200	TECHROUTE TR-IES-2512-P	Network_switch	G-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
240	NA	2019060024	172.16.4.201	TECHROUTE TR-IES-2512-P	Network_switch	Ch-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
241	NA	201810002111	172.16.4.202	TECHROUTE TR-IES-2512-P	Network_switch	G-3 Smart Pole	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
242	NA	201810002005	172.16.4.203	TECHROUTE TR-IES-2512-P	Network_switch	G-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
243	NA	201810002668	172.16.4.204	TECHROUTE TR-IES-2512-P	Network_switch	G-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
244	NA	201903009	172.16.4.205	TECHROUTE TR-IES-2512-P	Network_switch	KH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
245	NA	201906005	172.16.4.206	TECHROUTE TR-IES-2512-P	Network_switch	CH-6	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
246	NA	201810002677	172.16.4.207	TECHROUTE TR-IES-2512-P	Network_switch	GH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
247	NA	201810002700	172.16.4.208	TECHROUTE TR-IES-2512-P	Network_switch	K-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
248	NA	201903061	172.16.4.209	TECHROUTE TR-IES-2512-P	Network_switch	GH-7	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
249	NA	201903001	172.16.4.210	TECHROUTE TR-IES-2512-P	Network_switch	GH-7	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
250	NA	201906029	172.16.4.211	TECHROUTE TR-IES-2512-P	Network_switch	GH-7	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
251	NA	201903021	172.16.4.212	TECHROUTE TR-IES-2512-P	Network_switch	CH-3 Way-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
252	NA	201903002	172.16.4.213	TECHROUTE TR-IES-2512-P	Network_switch	GH-2 Sector 3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
253	NA	201903024	172.16.4.214	TECHROUTE TR-IES-2512-P	Network_switch	GH-2 Sector 7	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
254	NA	201903023	172.16.4.215	TECHROUTE TR-IES-2512-P	Network_switch	GH-4 Towords Ahmedabad	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
255	NA	201903057	172.16.4.216	TECHROUTE TR-IES-2512-P	Network_switch	GH-4 Towords GH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
256	NA	201810002918	172.16.4.217	TECHROUTE TR-IES-2512-P	Network_switch	GMC ICCC-Wifl/Camera SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
257	NA	201903035	172.16.4.218	TECHROUTE TR-IES-2512-P	Network_switch	GMC 4th Floor SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
258	NA	201903033	172.16.4.219	TECHROUTE TR-IES-2512-P	Network_switch	GMC 1st Floor SW-1 WIFI	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
259	NA	201810002355	172.16.4.220	TECHROUTE TR-IES-2512-P	Network_switch	GMC 1St Floor SW-2 Camera	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
260	NA	201810002500	172.16.4.221	TECHROUTE TR-IES-2512-P	Network_switch	Akshardham Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
261	NA	S34O2J3002629	172.16.4.222	TECHROUTE TR-IES-2512-P	Network_switch	Indroda_Park Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
262	NA	2018100021 5	172.16.4.223	TECHROUTE TR-IES-2512-P	Network_switch	Infocity Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
263	NA	2018100024 8	172.16.4.224	TECHROUTE TR-IES-2512-P	Network_switch	Sec-7_Shopping Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
264	NA	2019060034	172.16.4.225	TECHROUTE TR-IES-2512-P	Network_switch	CH-0 Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
265	NA	2019060037	172.16.4.226	TECHROUTE TR-IES-2512-P	Network_switch	Raksha_Shakti Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
266	NA	2019060035	172.16.4.227	TECHROUTE TR-IES-2512-P	Network_switch	G-7 Smart_Pole SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
267	NA	S34O2J3002661	172.16.4.228	TECHROUTE TR-IES-2512-P	Network_switch	Ch-4 B	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
268	NA	2019060051	172.16.4.229	TECHROUTE TR-IES-2512-P	Network_switch	GMC Second_Floor CAM SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
269	NA	2019030011	172.16.4.231	TECHROUTE TR-IES-2512-P	Network_switch	CH-3	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
270	NA	S34O2I5001575	172.16.4.232	TECHROUTE TR-IES-2512-P	Network_switch	GH-7 Circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
271	NA	2019030056	172.16.4.233	TECHROUTE TR-IES-2512-P	Network_switch	GH-7 Circle	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
272	NA	2019030036	172.16.4.234	TECHROUTE TR-IES-2512-P	Network_switch	GH-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
273	NA	2018100028 4	172.16.4.236	TECHROUTE TR-IES-2512-P	Network_switch	GH-5	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
274	NA	2019060016	172.16.4.241	TECHROUTE TR-IES-2512-P	Network_switch	Ground Floor	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
275	NA	2019060017	172.16.4.242	TECHROUTE TR-IES-2512-P	Network_switch	New GMC	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
276	NA	2019060050	172.16.4.243	TECHROUTE TR-IES-2512-P	Network_switch	Sector-28 Garden SP	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
277	NA	2019030021	172.16.4.244	TECHROUTE TR-IES-2512-P	Network_switch	CH-3 WAY-3 Side SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
278	NA	016U5O3000934	172.16.4.245	DG-IS4510HPE	Network_switch	New GMC	ICCC	2.0.2G Build 99967	DIGISOL	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
279	NA	2022010129	172.16.4.246	TECHROUTE TR-IES-2512-P	Network_switch	GMC_Second floor_Camera	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
280	NA	2018100022 7	172.16.4.247	TECHROUTE TR-IES-2512-P	Network_switch	New GMC Ground floor SW	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
281	NA	2018100022 2	172.16.4.248	TECHROUTE TR-IES-2512-P	Network_switch	New GMC 3rd Floor SW-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
282	NA	2018100029 8	172.16.4.249	TECHROUTE TR-IES-2512-P	Network_switch	New GMC 3rd Floor	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
283	NA	2019080005	172.16.4.250	TECHROUTE TR-IES-2512-P	Network_switch	New GMC 1st Floor SW-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
284	NA	2018100019 9	172.16.4.251	TECHROUTE TR-IES-2512-P	Network_switch	New GMC Ground floor SW-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
285	NA	2019030043	172.16.4.252	TECHROUTE TR-IES-2512-P	Network_switch	New GMC Ground floor SW-1	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
286	NA	2018100027 4	172.16.4.253	TECHROUTE TR-IES-2512-P	Network_switch	New GMC 3rd Floor SW-2	ICCC	1.1.0.1 (build-4.115)	TECHROUTE	INDIA
287	NA	2022010184	172.16.0.245	TR-IES-2510-P	Network_switch	ICCC_Camera_Switch	ICCC	1.4.15.705 (build-282)	techroute	INDIA
288	NA	2022010065	172.16.0.246	TR-IES-2510-P	Network_switch	ICCC_Camera_Switch	ICCC	1.4.15.705 (build-282)	techroute	INDIA
289	NA	2022010115	172.16.0.247	TR-IES-2510-P	Network_switch	ICCC_Bio Metric_Switch	ICCC	1.4.15.705 (build-282)	techroute	INDIA
290	NA	2022010163	172.16.0.248	TR-IES-2510-P	Network_switch	ICCC_Camera_Switch(Right)	ICCC	1.4.15.705 (build-282)	techroute	INDIA

43.3.11 WiFi

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	FGL2115B0JW	10.0.0.53	AIR-AP1562I-D-K9	WIFI_AP	KH-6	ICCC	NA	Cisco	USA
2	NA	JIN2152B04X	10.0.0.54	AIR-AP1562I-D-K9	WIFI_AP	G-2	ICCC	NA	Cisco	USA
3	NA	FGL2052B0MY	10.0.0.58	AIR-AP1562I-D-K9	WIFI_AP	Akshardham	ICCC	NA	Cisco	USA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
4	NA	JIN2151B0SV	10.0.0.59	AIR-AP1562I-D-K9	WIFI_AP	Indroda Park	ICCC	NA	Cisco	USA
5	NA	JIN2151B0SA	10.0.0.60	AIR-AP1562I-D-K9	WIFI_AP	Infocity	ICCC	NA	Cisco	USA
6	NA	JIN2126B01G	10.0.0.61	AIR-AP1562I-D-K9	WIFI_AP	Kh-5	ICCC	NA	Cisco	USA
7	NA	JIN2151B0SD	10.0.0.62	AIR-AP1562I-D-K9	WIFI_AP	Gh-1	ICCC	NA	Cisco	USA
8	NA	JIN2151B0MH	10.0.0.63	AIR-AP1562I-D-K9	WIFI_AP	Chh-4 a	ICCC	NA	Cisco	USA
9	NA	JIN2151B027	10.0.0.64	AIR-AP1562I-D-K9	WIFI_AP	Gh-3	ICCC	NA	Cisco	USA
10	NA	JIN2152B053	10.0.0.65	AIR-AP1562I-D-K9	WIFI_AP	Sector -7 Shopping Mall	ICCC	NA	Cisco	USA
11	NA	JIN2151B0SB	10.0.0.66	AIR-AP1562I-D-K9	WIFI_AP	Chh-6	ICCC	NA	Cisco	USA
12	NA	JIN2151B0RL	10.0.0.67	AIR-AP1562I-D-K9	WIFI_AP	Sec-1 garden	ICCC	NA	Cisco	USA
13	NA	JIN2151B0SH	10.0.0.68	AIR-AP1562I-D-K9	WIFI_AP	K-7	ICCC	NA	Cisco	USA
14	NA	JIN2152B05C	10.0.0.70	AIR-AP1562I-D-K9	WIFI_AP	Old Sachivalay	ICCC	NA	Cisco	USA
15	NA	JIN2151B0LP	10.0.0.71	AIR-AP1562I-D-K9	WIFI_AP	K-6	ICCC	NA	Cisco	USA
16	NA	JIN2151B0QU	10.0.0.72	AIR-AP1562I-D-K9	WIFI_AP	Kh-0	ICCC	NA	Cisco	USA
17	NA	JIN2151B0SQ	10.0.0.73	AIR-AP1562I-D-K9	WIFI_AP	GH-6	ICCC	NA	Cisco	USA
18	NA	FGL2052B2LX	10.0.0.74	AIR-AP1562I-D-K9	WIFI_AP	Ch-2	ICCC	NA	Cisco	USA
19	NA	JIN2151B00D	10.0.0.75	AIR-AP1562I-D-K9	WIFI_AP	ICCC	ICCC	NA	Cisco	USA
20	NA	JIN2152B04V	10.0.0.76	AIR-AP1562I-D-K9	WIFI_AP	Sarita Udhyan	ICCC	NA	Cisco	USA
21	NA	JIN2151B0QV	10.0.0.78	AIR-AP1562I-D-K9	WIFI_AP	Sector-6	ICCC	NA	Cisco	USA
22	NA	JIN2152B058	10.0.0.77	AIR-AP1562I-D-K9	WIFI_AP	Sector-22	ICCC	NA	Cisco	USA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
23	NA	FGL2052B344	10.0.0.79	AIR-AP1562I-D-K9	WIFI_AP	Sector-28	ICCC	NA	Cisco	USA
24	NA	JIN2152B04Q	10.0.0.80	AIR-AP1562I-D-K9	WIFI_AP	Relience Chokdi	ICCC	NA	Cisco	USA
25	NA	JIN2152B05H	10.0.0.81	AIR-AP1562I-D-K9	WIFI_AP	Gh-2	ICCC	NA	Cisco	USA
26	NA	FGL2051B0DV	10.0.0.82	AIR-AP1562I-D-K9	WIFI_AP	GH-5	ICCC	NA	Cisco	USA
27	NA	JIN2152B06G	10.0.0.83	AIR-AP1562I-D-K9	WIFI_AP	G-6	ICCC	NA	Cisco	USA
28	NA	JIN2152B05J	10.0.0.85	AIR-AP1562I-D-K9	WIFI_AP	K-5	ICCC	NA	Cisco	USA
29	NA	JIN2152B052	10.0.0.86	AIR-AP1562I-D-K9	WIFI_AP	K-5	ICCC	NA	Cisco	USA
30	NA	JIN2152B02B	10.0.0.87	AIR-AP1562I-D-K9	WIFI_AP	KH-3	ICCC	NA	Cisco	USA
31	NA	JIN2152B04J	10.0.0.88	AIR-AP1562I-D-K9	WIFI_AP	G-5	ICCC	NA	Cisco	USA
32	NA	JIN2152B04A	10.0.0.89	AIR-AP1562I-D-K9	WIFI_AP	G-1	ICCC	NA	Cisco	USA
33	NA	FGL2052B0WB	10.0.0.90	AIR-AP1562I-D-K9	WIFI_AP	G-3	ICCC	NA	Cisco	USA
34	NA	JIN2151B0R5	10.0.0.91	AIR-AP1562I-D-K9	WIFI_AP	CH-6	ICCC	NA	Cisco	USA
35	NA	FGL2052B0SB	10.0.0.92	AIR-AP1562I-D-K9	WIFI_AP	CH-5	ICCC	NA	Cisco	USA
36	NA	JIN2151B0R8	10.0.0.93	AIR-AP1562I-D-K9	WIFI_AP	Civil	ICCC	NA	Cisco	USA
37	NA	JIN2152B023	10.0.0.94	AIR-AP1562I-D-K9	WIFI_AP	2nd Floor Corridor - PWC Wing	ICCC	NA	Cisco	USA
38	NA	FGL2115B34K	10.0.0.95	AIR-AP1562I-D-K9	WIFI_AP	1st Floor Conference Room	ICCC	NA	Cisco	USA
39	NA	JIN2151B0RY	10.0.0.96	AIR-AP1562I-D-K9	WIFI_AP	1st Floor Corridor - Accounts Wing	ICCC	NA	Cisco	USA
40	NA	JIN2151B0RG	10.0.0.97	AIR-AP1562I-D-K9	WIFI_AP	1st Floor Commissioner Mam's Office	ICCC	NA	Cisco	USA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
41	NA	JIN2151B0R6	10.0.0.98	AIR-AP1562I-D-K9	WIFI_AP	1st Floor Corridor - Commissioner Wing	ICCC	NA	Cisco	USA
42	NA	JIN2152B01X	10.0.0.99	AIR-AP1562I-D-K9	WIFI_AP	4th Floor Corridor - Mayor Mam's Office	ICCC	NA	Cisco	USA
43	NA	JIN2152B04Y	10.0.0.100	AIR-AP1562I-D-K9	WIFI_AP	4th Floor Corridor - Opp Mayor Mam's Office	ICCC	NA	Cisco	USA
44	NA	JIN2151B0RU	10.0.0.101	AIR-AP1562I-D-K9	WIFI_AP	1st Floor Vora Sir Office	ICCC	NA	Cisco	USA
45	NA	JIN2152B04U	10.0.0.103	AIR-AP1562I-D-K9	WIFI_AP	CH-0	ICCC	NA	Cisco	USA
46	NA	JIN2152B04H	10.0.0.104	AIR-AP1562I-D-K9	WIFI_AP	Raksha Shakti	ICCC	NA	Cisco	USA
47	NA	JIN2152B05N	10.0.0.105	AIR-AP1562I-D-K9	WIFI_AP	G-7	ICCC	NA	Cisco	USA
48	NA	JIN2152B05F	10.0.0.106	AIR-AP1562I-D-K9	WIFI_AP	ICCC Control Room	ICCC	NA	Cisco	USA

43.3.12 ICCC Cameras

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmwa
1	NA	210235T65AA182000115	172.16.0.101	SIP-20EH537W-D4S	Dome Camera	UPS	ICCC	IPC_B0007P3
2	NA	210235T65AA182000122	172.16.0.102	SIP-20EH537W-D4S	Dome Camera	Server-1	ICCC	IPC_B0007P3
3	NA	210235T65AA182000186	172.16.0.103	SIP-20EH537W-D4S	Dome Camera	conf-1	ICCC	IPC_B0007P3
4	NA	210235T65AA182000256	172.16.0.104	SIP-20EH537W-D4S	Dome Camera	Reception area	ICCC	IPC_B0007P3
5	NA	NA	172.16.0.105	SIP-20EH537W-D4S	Dome Camera	Server-2	ICCC	IPC_B0007P3
6	NA	210235T65AA182000388	172.16.0.106	SIP-20EH537W-D4S	Dome Camera	technical-5	ICCC	IPC_B0007P3
7	NA	210235T65AA182000371	172.16.0.108	SIP-20EH537W-D4S	Dome Camera	entry gate	ICCC	IPC_B0007P3
8	NA	210235T65AA182000234	172.16.0.109	SIP-20EH537W-D4S	Dome Camera	conf -2	ICCC	IPC_B0007P3

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmwa
9	NA	210235T65AA182000146	172.16.0.111	SIP-20EH537W-D4S	Dome Camera	store	ICCC	IPC_B0007P3
10	NA	210235T65AA182000324	172.16.0.112	SIP-20EH537W-D4S	Dome Camera	electric room	ICCC	IPC_B0007P3
11	NA	210235T4UF3176000010	172.16.0.241	SIP-20EH4W-BO2	ICCC Camera	ICCC Control Room Fix-1	ICCC	IPC_HCM B0002P20
12	NA	A0210325T9RN318B000199	172.16.0.242	SIP-20EH4W-BO2	ICCC Camera	ICCC Control Room Fix-2	ICCC	IPC_HCM B0002P20
13	NA	210235T4UF3176000016	172.16.0.243	SIP-20EH4W-BO2	ICCC Camera	ICCC Control Room Fix-3	ICCC	IPC_HCM B0002P20
14	NA	210235T9RN318B000154	172.16.0.244	SIP-20EH4W-BO2	ICCC Camera	ICCC Control Room Fix-4	ICCC	IPC_HCM B0002P20

43.3.13 Access Control

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	NA	172.16.0.113	N/A	ACCESS CONTROL	Control Room	ICCC	NA	Matrix	INDIA
2	NA	NA	172.16.0.114	N/A	ACCESS CONTROL	Control Room	ICCC	NA	Matrix	INDIA
3	NA	NA	172.16.0.115	N/A	ACCESS CONTROL	Control Room	ICCC	NA	Matrix	INDIA
4	NA	NA	172.16.0.116	N/A	ACCESS CONTROL	Control Room	ICCC	NA	Matrix	INDIA
5	NA	NA	172.16.0.117	N/A	ACCESS CONTROL	Control Room	ICCC	NA	Matrix	INDIA
6	NA	2211303190	172.16.0.155	S-B251CB/WIFI	Bio Metric	Biometric device-Amnex	ICCC	NA	Secureye	INDIA

43.3.14 Workstations

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	FXP52S2	172.16.0.121	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
2	NA	FXW62S2	172.16.0.122	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
3	NA	FY082S2	172.16.0.123	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
4	NA	FXZ12S2	172.16.0.124	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
5	NA	FXX62S2	172.16.0.125	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
6	NA	FXY32S2	172.16.0.126	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
7	NA	FXV72S2	172.16.0.127	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA
8	NA	FXQ82S2	172.16.0.128	Precision 3630 Tower	Work Station	Control Room	ICCC	2.27.0	Dell	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
9	NA	25YX5N3	172.16.0.131	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
10	NA	75YX5N3	172.16.0.132	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
11	NA	C4YX5N3	172.16.0.133	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
12	NA	74YX5N3	172.16.0.134	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
13	NA	H4YX5N3	172.16.0.135	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
14	NA	45YX5N3	172.16.0.136	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
15	NA	B5YX5N3	172.16.0.137	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
16	NA	35YX5N3	172.16.0.138	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
17	NA	95YX5N3	172.16.0.139	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
18	NA	85YX5N3	172.16.0.140	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
19	NA	54YX5N3	172.16.0.143	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
20	NA	J4YX5N3	172.16.0.144	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
21	NA	15YX5N3	172.16.0.145	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
22	NA	65YX5N3	172.16.0.146	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
23	NA	B4YX5N3	172.16.0.147	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
24	NA	F4YX5N3	172.16.0.148	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
25	NA	84YX5N3	172.16.0.149	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
26	NA	D4YX5N3	172.16.0.150	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
27	NA	64YX5N3	172.16.0.151	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
28	NA	G4YX5N3	172.16.0.152	Precision 3650 Tower	Work Station	New Control Room	ICCC	1.29.0	Dell	INDIA
29	NA	FXS12S2	172.16.0.159	N/A	PC	DYMC(Sir)	ICCC	NA	Dell	INDIA
30	NA	BR82FM3	172.16.0.169	OptiPlex 3080	PC	Cattle House	ICCC	NA	Dell	INDIA
31	NA	BR82FM3	172.16.0.180	Precision 3650 Tower	PC	DYMC(Sir) Choudhary	ICCC	1.29.0	Dell	INDIA

43.3.15 Printer

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	YAN00704	172.16.0.120	IR 4551	Printer	Control Room	ICCC	NA	Canon	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
2	NA	YAN00704	172.16.0.118	IR 4551	Printer	Control Room	ICCC	NA	Canon	INDIA

43.3.16 Video wall

IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
NA	KMA3965748	172.16.0.141	PR1604001Pand	Video Wall Cotroller	Control Room	ICCC	Windows 7	ADVANTECH	INDIA
NA	19181014 19181014 19181014 19181014 19181014 19181014 19181014 19181014 19181014 19181014		LHD 70D LED	Video Wall Cubes-70/72 LED in 5 X 2 matrix	ICCC	ICCC	-	Pyrotech/Barco	INDIA

43.3.17 Laptops

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	HBHB5H2	172.16.16.XX	DELL Latitude E5470	Laptop	ICCC	ICCC	NA	Dell	INDIA
2	NA	14T4XZ2	172.16.16.XX	DELL Latitude 3400	Laptop	ICCC	ICCC	NA	Dell	INDIA
3	NA	CND1234OBY	172.16.16.XX	HP 255 G8	Laptop	ICCC	ICCC	NA	HP	INDIA
4	NA	CNDC5H2	172.16.16.XX	DELL Latitude E5470	Laptop	ICCC	ICCC	NA	Dell	INDIA
5	NA	6DPP542	172.16.16.XX	DELL Latitude E5440	Laptop	ICCC	ICCC	NA	Dell	INDIA
6	NA	7HH03C2	172.16.16.XX	DELL Latitude 3460	Laptop	ICCC	ICCC	NA	Dell	INDIA
7	NA	7HC8YQ2	172.16.0.158	N/A	Laptop	Divyesh Bhai	ICCC	NA	HP	INDIA

43.3.18 IP Phone

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	IRLP067 10011	172.16. 0.178	Connect -IP2LP	IP Phones	IP Phone-Technical	ICCC	52.114.8.4	Coral	INDIA
2	NA	IRLP067 10012	172.16. 0.235	Connect -IP2LP	IP Phones	IP Phone-23	ICCC	52.114.8.4	Coral	INDIA
3	NA	IRLP067 10013	172.16. 0.179	Connect -IP2LP	IP Phones	IP Pone Reception	ICCC	52.114.8.4	Coral	INDIA
4	NA	IRLP067 10014	172.16. 0.237	Connect -IP2LP	IP Phones	IP Phone-25	ICCC	52.114.8.4	Coral	INDIA
5	NA	IRLP067 10015	172.16. 0.238	Connect -IP2LP	IP Phones	IP Phone-26	ICCC	52.114.8.4	Coral	INDIA
6	NA	IRLP067 10016	172.16. 0.239	Connect -IP2LP	IP Phones	IP Phone-28	ICCC	52.114.8.4	Coral	INDIA
7	NA	IRLP067 10017	172.16. 0.228	Connect -IP2LP	IP Phones	IP Phone-16	ICCC	52.114.8.4	Coral	INDIA
8	NA	IRLP067 10018	172.16. 0.230	Connect -IP2LP	IP Phones	IP Phone-18	ICCC	52.114.8.4	Coral	INDIA
9	NA	IRLP067 10019	172.16. 0.240	Connect -IP2LP	IP Phones	IP Phone-Confrence room	ICCC	52.114.8.4	Coral	INDIA
10	NA	IRLP067 10021	172.16. 0.233	Connect -IP2LP	IP Phones	IP Phone-21	ICCC	52.114.8.4	Coral	INDIA
11	NA	IRLP067 10023	172.16. 0.231	Connect -IP2LP	IP Phones	IP Phone-19	ICCC	52.114.8.4	Coral	INDIA
12	NA	IRLP067 10026	172.16. 0.232	Connect -IP2LP	IP Phones	IP Phone-20	ICCC	52.114.8.4	Coral	INDIA
13	NA	IRLP067 10027	172.16. 0.234	Connect -IP2LP	IP Phones	IP Phone-22	ICCC	52.114.8.4	Coral	INDIA
14	NA	IRLP067 10028	172.16. 0.226	Connect -IP2LP	IP Phones	IP Phone-14	ICCC	52.114.8.4	Coral	INDIA
15	NA	IRLP067 10030	172.16. 0.211	Connect -IP2LP	IP Phones	IP Phone-1	ICCC	52.114.8.4	Coral	INDIA
16	NA	IRLP067 10031	172.16. 0.229	Connect -IP2LP	IP Phones	IP Phone-17	ICCC	52.114.8.4	Coral	INDIA
17	NA	IRLP067 10032	172.16. 0.212	Connect -IP2LP	IP Phones	IP Phone-2	ICCC	52.114.8.4	Coral	INDIA
18	NA	IRLP067 10033	172.16. 0.227	Connect -IP2LP	IP Phones	IP Phone-15	ICCC	52.114.8.4	Coral	INDIA
19	NA	IRLP067 10034	172.16. 0.213	Connect -IP2LP	IP Phones	IP Phone-3	ICCC	52.114.8.4	Coral	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
20	NA	IRLP06710035	172.16.0.214	Connect-IP2LP	IP Phones	IP Phone-4	ICCC	52.114.8.4	Coral	INDIA
21	NA	IRLP06710036	172.16.0.215	Connect-IP2LP	IP Phones	IP Phone-5	ICCC	52.114.8.4	Coral	INDIA
22	NA	IRLP06710037	172.16.0.216	Connect-IP2LP	IP Phones	IP Phone-6	ICCC	52.114.8.4	Coral	INDIA
23	NA	IRLP06710039	172.16.0.217	Connect-IP2LP	IP Phones	IP Phone-7	ICCC	52.114.8.4	Coral	INDIA
24	NA	IRLP06710041	172.16.0.218	Connect-IP2LP	IP Phones	IP Phone-8	ICCC	52.114.8.4	Coral	INDIA
25	NA	IRLP06710042	172.16.0.220	Connect-IP2LP	IP Phones	IP Phone-27	ICCC	52.114.8.4	Coral	INDIA
26	NA	IRLP06710043	172.16.0.221	Connect-IP2LP	IP Phones	IP Phone-9	ICCC	52.114.8.4	Coral	INDIA
27	NA	IRLP06710044	172.16.0.222	Connect-IP2LP	IP Phones	IP Phone-10	ICCC	52.114.8.4	Coral	INDIA
28	NA	IRLP06710045	172.16.0.223	Connect-IP2LP	IP Phones	IP Phone-11	ICCC	52.114.8.4	Coral	INDIA
29	NA	IRLP06710047	172.16.0.224	Connect-IP2LP	IP Phones	IP Phone-12	ICCC	52.114.8.4	Coral	INDIA
30	NA	IRLP06710048	172.16.0.225	Connect-IP2LP	IP Phones	IP Phone-13	ICCC	52.114.8.4	Coral	INDIA
31	NA	IRLP06710051	172.16.0.236	Connect-IP2LP	IP Phones	IP Phone-24	ICCC	52.114.8.4	Coral	INDIA

43.3.19 Media Player

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	NA	172.16.7.21	TB2-4G	Media Player	Ch-3.1	ICCC	NA	NOVA STAR	INDIA
2	NA	NA	172.16.7.29	TB2-4G	Media Player	Ch-3.2	ICCC	NA	NOVA STAR	INDIA
3	NA	NA	172.16.7.33	TB2-4G	Media Player	Ch-4 B	ICCC	NA	NOVA STAR	INDIA
4	NA	NA	172.16.7.35	TB2-4G	Media Player	Ch-5	ICCC	NA	NOVA STAR	INDIA
5	NA	NA	172.16.7.39	TB2-4G	Media Player	Gh-2	ICCC	NA	NOVA STAR	INDIA
6	NA	NA	172.16.7.28	TB2-4G	Media Player	Gh-3	ICCC	NA	NOVA STAR	INDIA
7	NA	NA	172.16.7.25	TB2-4G	Media Player	GH-5.1	ICCC	NA	NOVA STAR	INDIA
8	NA	NA	172.16.7.37	TB2-4G	Media Player	Gh-5.2	ICCC	NA	NOVA STAR	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
9	NA	NA	172.16.7.24	TB2-4G	Media Player	GH-6	ICCC	NA	NOVA STAR	INDIA

43.3.20 Variable Messaging Displays

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	AQDG-96128-332622001	172.16.6.91	e-VMD/18/942d	VMD	CH-3	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
2	NA	AQDG-96128-332622039	172.16.6.95	e-VMD/18/942d	VMD	G-2	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
3	NA	AQDG-96128-332622036	172.16.6.92	e-VMD/18/942d	VMD	KH-1	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
4	NA	AQDG-96128-332622010	172.16.6.94	e-VMD/18/942d	VMD	KH-2	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
5	NA	AQDG-96128-332622011	172.16.6.93	e-VMD/18/942d	VMD	KH-6	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
6	NA	AQDG-96128-332622012	172.16.6.96	e-VMD/18/942d	VMD	KH-0(Sargasan)	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
7	NA	AQDG-96128-332622014	172.16.6.97	e-VMD/18/942d	VMD	K-6	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
8	NA	AQDG-96128-332622025	172.16.6.98	e-VMD/18/942d	VMD	K-7	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
9	NA	AQDG-96128-332622031	172.16.6.99	e-VMD/18/942d	VMD	GH-6	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
10	NA	AQDG-96128-332622007	172.16.6.101	e-VMD/18/942d	VMD	CHH-6	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
11	NA	AQDG-96128-332622006	172.16.6.102	e-VMD/18/942d	VMD	CHH-4A	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
12	NA	AQDG-96128-332622023	172.16.6.103	e-VMD/18/942d	VMD	Sector-1 Garden	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
13	NA	AQDG-96128-332622017	172.16.6.104	e-VMD/18/942d	VMD	Old Sachivalay Main Gate	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
14	NA	AQDG-96128-332622004	172.16.6.105	e-VMD/18/942d	VMD	KH-5	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
15	NA	AQDG-96128-332622005	172.16.6.106	e-VMD/18/942d	VMD	GH-1	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
16	NA	AQDG-96128-332622022	172.16.6.107	e-VMD/18/942d	VMD	GH-3	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
17	NA	AQDG-96128-332622021	172.16.6.108	e-VMD/18/942d	VMD	Civil Hospital	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
18	NA	AQDG-96128-332622015	172.16.6.109	e-VMD/18/942d	VMD	Sarita Udhyan	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
19	NA	AQDG-96128-332622028	172.16.6.110	e-VMD/18/942d	VMD	Sector 6 Shopping Center	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
20	NA	AQDG-96128-332622003	172.16.6.111	e-VMD/18/942d	VMD	Sector 22 Shopping Mall	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
21	NA	AQDG-96128-332622030	172.16.6.112	e-VMD/18/942d	VMD	Sector-28 Garden	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
22	NA	AQDG-96128-332622013	172.16.6.114	e-VMD/18/942d	VMD	GH-2	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
23	NA	AQDG-96128-332622002	172.16.6.115	e-VMD/18/942d	VMD	CH-5	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
24	NA	AQDG-96128-332622038	172.16.6.116	e-VMD/18/942d	VMD	CH-6	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
25	NA	AQDG-96128-332622037	172.16.6.117	e-VMD/18/942d	VMD	GH-5	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
26	NA	AQDG-96128-332622009	172.16.6.118	e-VMD/18/942d	VMD	K-5	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
27	NA	AQDG-96128-332622033	172.16.6.120	e-VMD/18/942d	VMD	G-1	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
28	NA	AQDG-96128-332622026	172.16.6.121	e-VMD/18/942d	VMD	G-3	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
29	NA	AQDG-96128-332622019	172.16.6.122	e-VMD/18/942d	VMD	G-5	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
30	NA	AQDG-96128-332622035	172.16.6.123	e-VMD/18/942d	VMD	G-6	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
31	NA	AQDG-96128-332622020	172.16.6.128	e-VMD/18/942d	VMD	KH-3	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
32	NA	AQDG-96128-332622018	172.16.6.124	e-VMD/18/942d	VMD	Akshardham	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
33	NA	AQDG-96128-332622027	172.16.6.125	e-VMD/18/942d	VMD	Indroda Park	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
34	NA	AQDG-96128-332622008	172.16.6.126	e-VMD/18/942d	VMD	Infocity	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
35	NA	AQDG-96128-332622016	172.16.6.127	e-VMD/18/942d	VMD	Sector -7 Shopping Mall	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
36	NA	AQDG-96128-332622032	172.16.6.16	e-VMD/18/942d	VMD	CH-0	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
37	NA	AQDG-96128-332622040	172.16.6.18	e-VMD/18/942d	VMD	G-7	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA
38	NA	AQDG-96128-332622029	172.16.6.113	e-VMD/18/942d	VMD	Reliance Chokadi	ICCC	200.40.4CH 13/05/2019	ATRIYO	INDIA

43.3.21 Environment Sensors

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Fir V
1	NA	IO01P0028	172.16.6.131	AS-1ESNDV.12	EnvironmentSensor	CH-3	ICCC	
2	NA	IO01P0017	172.16.6.132	AS-1ESNDV.12	EnvironmentSensor	G-2	ICCC	
3	NA	IO01P0004	172.16.6.133	AS-1ESNDV.12	EnvironmentSensor	KH-1	ICCC	
4	NA	IO01P0035	172.16.6.134	AS-1ESNDV.12	EnvironmentSensor	KH-2	ICCC	
5	NA	IO01P0019	172.16.6.135	AS-1ESNDV.12	EnvironmentSensor	KH-6	ICCC	
6	NA	IO01P0023	172.16.6.136	AS-1ESNDV.12	EnvironmentSensor	KH-0(Sargasan)	ICCC	
7	NA	IO01P0015	172.16.6.137	AS-1ESNDV.12	EnvironmentSensor	K-6	ICCC	
8	NA	IO01P0002	172.16.6.138	AS-1ESNDV.12	EnvironmentSensor	K-7	ICCC	
9	NA	IO01P0003	172.16.6.139	AS-1ESNDV.12	EnvironmentSensor	GH-6	ICCC	
10	NA	IO01P0027	172.16.6.141	AS-1ESNDV.12	EnvironmentSensor	CHH-6	ICCC	
11	NA	IO01P0009	172.16.6.142	AS-1ESNDV.12	EnvironmentSensor	CHH-4A	ICCC	
12	NA	IO01P0030	172.16.6.143	AS-1ESNDV.12	EnvironmentSensor	Sector-1 Garden	ICCC	
13	NA	IO01P0026	172.16.6.144	AS-1ESNDV.12	EnvironmentSensor	Old Sachivalay Main Gate	ICCC	
14	NA	IO01P0011	172.16.6.145	AS-1ESNDV.12	EnvironmentSensor	KH-5	ICCC	
15	NA	IO01P0008	172.16.6.146	AS-1ESNDV.12	EnvironmentSensor	GH-1	ICCC	
16	NA	IO01P0025	172.16.6.147	AS-1ESNDV.12	EnvironmentSensor	GH-3	ICCC	
17	NA	IO01P0022	172.16.6.148	AS-1ESNDV.12	EnvironmentSensor	Civil Hospital	ICCC	
18	NA	IO01P0005	172.16.6.149	AS-1ESNDV.12	EnvironmentSensor	Sarita Udhyan	ICCC	
19	NA	IO01P0016	172.16.6.150	AS-1ESNDV.12	EnvironmentSensor	Sector 6 Shopping Center	ICCC	
20	NA	IO01P0040	172.16.6.151	AS-1ESNDV.12	EnvironmentSensor	Sector 22 Shopping Mall	ICCC	
21	NA	IO01P0032	172.16.6.152	AS-1ESNDV.12	EnvironmentSensor	Sector-28 Garden	ICCC	

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Fi V
22	NA	IO01P0021	172.16.6.154	AS-1ESNDV.12	EnvironmentSensor	GH-2	ICCC	
23	NA	IO01P0036	172.16.6.155	AS-1ESNDV.12	EnvironmentSensor	CH-5	ICCC	
24	NA	IO01P0020	172.16.6.156	AS-1ESNDV.12	EnvironmentSensor	CH-6	ICCC	
25	NA	IO01P0007	172.16.6.157	AS-1ESNDV.12	EnvironmentSensor	GH-5	ICCC	
26	NA	IO01P0038	172.16.6.158	AS-1ESNDV.12	EnvironmentSensor	K-5	ICCC	
27	NA	IO01P0033	172.16.6.160	AS-1ESNDV.12	EnvironmentSensor	G-1	ICCC	
28	NA	IO01P0029	172.16.6.161	AS-1ESNDV.12	EnvironmentSensor	G-3	ICCC	
29	NA	IO01P0006	172.16.6.162	AS-1ESNDV.12	EnvironmentSensor	G-5	ICCC	
30	NA	IO01P0031	172.16.6.163	AS-1ESNDV.12	EnvironmentSensor	G-6	ICCC	
31	NA	IO01P0039	172.16.6.159	AS-1ESNDV.12	EnvironmentSensor	KH-3	ICCC	
32	NA	IO01P0001	172.16.6.164	AS-1ESNDV.12	EnvironmentSensor	Akshardham	ICCC	
33	NA	IO01P0037	172.16.6.165	AS-1ESNDV.12	EnvironmentSensor	Indroda Park	ICCC	
34	NA	IO01P0014	172.16.6.166	AS-1ESNDV.12	EnvironmentSensor	Infocity	ICCC	
35	NA	IO01P0024	172.16.6.167	AS-1ESNDV.12	EnvironmentSensor	Sector -7 Shopping Mall	ICCC	
36	NA	IO01P0018	172.16.6.21	AS-1ESNDV.12	EnvironmentSensor	CH-0	ICCC	
37	NA	IO01P0034	172.16.6.23	AS-1ESNDV.12	EnvironmentSensor	G-7	ICCC	
38	NA	IO01P0012	172.16.6.153	AS-1ESNDV.12	EnvironmentSensor	Reliance Chokadi	ICCC	

43.3.22 Panic Button

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	PB001	172.16.6.211	ePAC-2071	Panic Button	CH-3	ICCC	NA	Energasia	INDIA
2	NA	PB002	172.16.6.215	ePAC-2071	Panic Button	G-2	ICCC	NA	Energasia	INDIA
3	NA	PB004	172.16.6.212	ePAC-2071	Panic Button	KH-1	ICCC	NA	Energasia	INDIA
4	NA	PB005	172.16.6.213	ePAC-2071	Panic Button	KH-2	ICCC	NA	Energasia	INDIA
5	NA	PB009	172.16.6.214	ePAC-2071	Panic Button	KH-6	ICCC	NA	Energasia	INDIA
6	NA	PB011	172.16.6.221	ePAC-2071	Panic Button	KH-0(Sargasan)	ICCC	NA	Energasia	INDIA
7	NA	PB021	172.16.6.231	ePAC-2071	Panic Button	K-6	ICCC	NA	Energasia	INDIA
8	NA	PB010	172.16.6.220	ePAC-2071	Panic Button	K-7	ICCC	NA	Energasia	INDIA
9	NA	PB009	172.16.6.219	ePAC-2071	Panic Button	GH-6	ICCC	NA	Energasia	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
10	NA	PB034	172.16.6.247	ePAC-2071	Panic Button	CHH-6	ICCC	NA	Energasia	INDIA
11	NA	PB033	172.16.6.243	ePAC-2071	Panic Button	CHH-4A	ICCC	NA	Energasia	INDIA
12	NA	PB018	172.16.6.228	ePAC-2071	Panic Button	Sector-1 Garden	ICCC	NA	Energasia	INDIA
13	NA	PB012	172.16.6.222	ePAC-2071	Panic Button	KH-5	ICCC	NA	Energasia	INDIA
14	NA	PB014	172.16.6.224	ePAC-2071	Panic Button	GH-1	ICCC	NA	Energasia	INDIA
15	NA	PB006	172.16.6.216	ePAC-2071	Panic Button	GH-3	ICCC	NA	Energasia	INDIA
16	NA	PB015	172.16.6.225	ePAC-2071	Panic Button	Civil Hospital	ICCC	NA	Energasia	INDIA
17	NA	PB026	172.16.6.240	ePAC-2071	Panic Button	Sarita Udhyan	ICCC	NA	Energasia	INDIA
18	NA	PB017	172.16.6.237	ePAC-2071	Panic Button	Sector 6 Shopping Center	ICCC	NA	Energasia	INDIA
19	NA	PB035	172.16.6.236	ePAC-2071	Panic Button	Sector 22 Shopping Mall	ICCC	NA	Energasia	INDIA
20	NA	PB023	172.16.6.249	ePAC-2071	Panic Button	Sector-28 Garden	ICCC	NA	Energasia	INDIA
21	NA	PB020	172.16.6.238	ePAC-2071	Panic Button	GH-2	ICCC	NA	Energasia	INDIA
22	NA	PB031	172.16.6.241	ePAC-2071	Panic Button	CH-5	ICCC	NA	Energasia	INDIA
23	NA	PB030	172.16.6.229	ePAC-2071	Panic Button	CH-6	ICCC	NA	Energasia	INDIA
24	NA	PB028	172.16.6.248	ePAC-2071	Panic Button	GH-5	ICCC	NA	Energasia	INDIA
25	NA	PB008	172.16.6.218	ePAC-2071	Panic Button	K-5	ICCC	NA	Energasia	INDIA
26	NA	PB029	172.16.6.233	ePAC-2071	Panic Button	G-1	ICCC	NA	Energasia	INDIA
27	NA	PB013	172.16.6.223	ePAC-2071	Panic Button	G-3	ICCC	NA	Energasia	INDIA
28	NA	PB027	172.16.6.245	ePAC-2071	Panic Button	G-5	ICCC	NA	Energasia	INDIA
29	NA	PB032	172.16.6.227	ePAC-2071	Panic Button	G-6	ICCC	NA	Energasia	INDIA
30	NA	NA	172.16.6.230	ePAC-2071	Panic Button	KH-3	ICCC	NA	Energasia	INDIA
31	NA	NA	172.16.6.250	ePAC-2071	Panic Button	Akshardham	ICCC	NA	Energasia	INDIA
32	NA	NA	172.16.6.246	ePAC-2071	Panic Button	Indroda Park	ICCC	NA	Energasia	INDIA
33	NA	NA	172.16.6.239	ePAC-2071	Panic Button	Infocity	ICCC	NA	Energasia	INDIA
34	NA	NA	172.16.6.244	ePAC-2071	Panic Button	Sector -7 Shopping Mall	ICCC	NA	Energasia	INDIA
35	NA	NA	172.16.6.31	ePAC-2071	Panic Button	CH-0	ICCC	NA	Energasia	INDIA
36	NA	NA	172.16.6.33	ePAC-2071	Panic Button	G-7	ICCC	NA	Energasia	INDIA
37	NA	NA	172.16.6.234	ePAC-2071	Panic Button	Reliance Chokadi	ICCC	NA	Energasia	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
38	NA	NA	172.16.6.235	ePAC-2071	Panic Button	G-7	ICCC	NA	Energasia	INDIA

43.3.23 Energy Meter (Smart Pole Component)

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	18-12-GOB-2505	172.16.6.171	ATC-1200	Energy Meter	CH-3	ICCC	N/A	Trinity	INDIA
2	NA	18-10-GOB-2498	172.16.6.172	ATC-1200	Energy Meter	G-2	ICCC	N/A	Trinity	INDIA
3	NA	18-12-GOB-2504	172.16.6.173	ATC-1200	Energy Meter	KH-1	ICCC	N/A	Trinity	INDIA
4	NA	18-12-GOB-2502	172.16.6.174	ATC-1200	Energy Meter	KH-2	ICCC	N/A	Trinity	INDIA
5	NA	18-12-GOB-2548	172.16.6.175	ATC-1200	Energy Meter	KH-6	ICCC	N/A	Trinity	INDIA
6	NA	18-12-GOB-2533	172.16.6.176	ATC-1200	Energy Meter	KH-0(Sargasan)	ICCC	N/A	Trinity	INDIA
7	NA	18-12-GOB-2552	172.16.6.177	ATC-1200	Energy Meter	K-6	ICCC	N/A	Trinity	INDIA
8	NA	18-12-GOB-2542	172.16.6.178	ATC-1200	Energy Meter	K-7	ICCC	N/A	Trinity	INDIA
9	NA	18-12-GOB-2532	172.16.6.179	ATC-1200	Energy Meter	GH-6	ICCC	N/A	Trinity	INDIA
10	NA	18-12-GOB-2521	172.16.6.181	ATC-1200	Energy Meter	CHH-6	ICCC	N/A	Trinity	INDIA
11	NA	18-12-GOB-2526	172.16.6.182	ATC-1200	Energy Meter	CHH-4A	ICCC	N/A	Trinity	INDIA
12	NA	18-12-GOB-2553	172.16.6.183	ATC-1200	Energy Meter	Sector-1 Garden	ICCC	N/A	Trinity	INDIA
13	NA	18-12-GOB-2524	172.16.6.184	ATC-1200	Energy Meter	Old Sachivalay Main Gate	ICCC	N/A	Trinity	INDIA
14	NA	18-12-GOB-2525	172.16.6.185	ATC-1200	Energy Meter	KH-5	ICCC	N/A	Trinity	INDIA
15	NA	18-12-GOB-2536	172.16.6.186	ATC-1200	Energy Meter	GH-1	ICCC	N/A	Trinity	INDIA
16	NA	18-12-GOB-2539	172.16.6.187	ATC-1200	Energy Meter	GH-3	ICCC	N/A	Trinity	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
17	NA	18-12-GOB-2541	172.16.6.188	ATC-1200	Energy Meter	Civil Hospital	ICCC	N/A	Trinity	INDIA
18	NA	18-12-GOB-2531	172.16.6.189	ATC-1200	Energy Meter	Sarita Udhyan	ICCC	N/A	Trinity	INDIA
19	NA	18-12-GOB-2549	172.16.6.190	ATC-1200	Energy Meter	Sector 6 Shopping Center	ICCC	N/A	Trinity	INDIA
20	NA	18-12-GOB-2545	172.16.6.191	ATC-1200	Energy Meter	Sector 22 Shopping Mall	ICCC	N/A	Trinity	INDIA
21	NA	18-12-GOB-2544	172.16.6.192	ATC-1200	Energy Meter	Sector-28 Garden	ICCC	N/A	Trinity	INDIA
22	NA	18-12-GOB-2535	172.16.6.194	ATC-1200	Energy Meter	GH-2	ICCC	N/A	Trinity	INDIA
23	NA	18-12-GOB-2547	172.16.6.195	ATC-1200	Energy Meter	CH-5	ICCC	N/A	Trinity	INDIA
24	NA	18-12-GOB-2546	172.16.6.196	ATC-1200	Energy Meter	CH-6	ICCC	N/A	Trinity	INDIA
25	NA	18-12-GOB-2538	172.16.6.197	ATC-1200	Energy Meter	GH-5	ICCC	N/A	Trinity	INDIA
26	NA	18-12-GOB-2523	172.16.6.198	ATC-1200	Energy Meter	K-5	ICCC	N/A	Trinity	INDIA
27	NA	18-12-GOB-2534	172.16.6.200	ATC-1200	Energy Meter	G-1	ICCC	N/A	Trinity	INDIA
28	NA	18-12-GOB-2554	172.16.6.201	ATC-1200	Energy Meter	G-3	ICCC	N/A	Trinity	INDIA
29	NA	18-12-GOB-2522	172.16.6.202	ATC-1200	Energy Meter	G-5	ICCC	N/A	Trinity	INDIA
30	NA	18-12-GOB-2537	172.16.6.203	ATC-1200	Energy Meter	G-6	ICCC	N/A	Trinity	INDIA
31	NA	18-12-GOB-2520	172.16.6.199	ATC-1200	Energy Meter	KH-3	ICCC	N/A	Trinity	INDIA
32	NA	18-12-GOB-2517	172.16.6.205	ATC-1200	Energy Meter	Akshardham	ICCC	N/A	Trinity	INDIA
33	NA	18-12-GOB-2501	172.16.6.206	ATC-1200	Energy Meter	Indroda Park	ICCC	N/A	Trinity	INDIA
34	NA	18-12-GOB-2519	172.16.6.207	ATC-1200	Energy Meter	Infocity	ICCC	N/A	Trinity	INDIA
35	NA	18-12-GOB-2518	172.16.6.208	ATC-1200	Energy Meter	Sector -7 Shopping Mall	ICCC	N/A	Trinity	INDIA

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
36	NA	18-12-GOB-2551	172.16.6.26	ATC-1200	Energy Meter	CH-0	ICCC	N/A	Trinity	INDIA
37	NA	18-12-GOB-2557	172.16.6.28	ATC-1200	Energy Meter	G-7	ICCC	N/A	Trinity	INDIA
38	NA	18-12-GOB-2550	172.16.6.193	ATC-1200	Energy Meter	Reliance Chokadi	ICCC	N/A	Trinity	INDIA

43.3.24 SLS Dongle

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make
1	NA	NA	172.16.7.22	UE300	SLS Dongle	Ch-3.1	ICCC	NA	TP-Link
2	NA	NA	172.16.7.30	UE300	SLS Dongle	Ch-3.2	ICCC	NA	TP-Link
3	NA	NA	172.16.7.34	UE300	SLS Dongle	Ch-4 B	ICCC	NA	TP-Link
4	NA	NA	172.16.7.36	UE300	SLS Dongle	Ch-5	ICCC	NA	TP-Link
5	NA	NA	172.16.7.40	UE300	SLS Dongle	Gh-2	ICCC	NA	TP-Link
6	NA	NA	172.16.7.27	UE300	SLS Dongle	Gh-3	ICCC	NA	TP-Link
7	NA	NA	172.16.7.26	UE300	SLS Dongle	GH-5.1	ICCC	NA	TP-Link
8	NA	NA	172.16.7.38	UE300	SLS Dongle	Gh-5.2	ICCC	NA	TP-Link
9	NA	NA	172.16.7.23	UE300	SLS Dongle	GH-6	ICCC	NA	TP-Link

43.3.25 Others

#	IMEI No	Serial No.	IP Address	MODEL NO	Type	Location of Installation	Primary Asset Owner	Firmware Version	Make	Country of Origin
1	NA	2019030003	172.16.0.130	TR-IES-2512-P	SP_Office SW	SP_Office SW	ICCC	1.1.0.1 (build-4.115)	Dell	INDIA
2	NA	INA848TXRB	172.16.0.170	HP Z240	PC	SP office_CCTV_1	ICCC	NA	HP	INDIA
3	NA	37329552686	172.16.0.171	HP Z240	PC	SP office_CCTV_2	ICCC	NA	HP	INDIA
4	NA	37329674546	172.16.0.172	HP Z240	PC	SP office_CCTV_3	ICCC	NA	HP	INDIA
5	NA	INA848TXTR	172.16.0.173	HP Z240	PC	SP office_CCTV_4	ICCC	NA	HP	INDIA
6	NA	INA848TXW	172.16.0.174	HP Z240	PC	SP office_CCTV_5	ICCC	NA	HP	INDIA
7	NA	37329596822	172.16.0.157	HP Z240	PC	SP office_CCTV	ICCC	NA	HP	INDIA
8	NA	NA	172.16.0.165	N/A	PC	SWM Weigh bridge Desktop	ICCC	NA	Dell	INDIA

43.4 Servers and Network Devices

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
1	Security	Fortinet	FortiGate 1500D	-	172.16.0.1	ICCC
2	Security	Fortinet	FortiGate 1500D	-	172.16.0.254	ICCC
3	Connectivity	Cisco	N7K-C7009	-	172.16.0.2	ICCC
4	Connectivity	Cisco	N7K-C7009	-	172.16.0.3	ICCC
5	Connectivity	Cisco	CAT9K	-	172.16.1.250	ICCC
6	Storage	HPE	HP MSA 2050	-	172.16.0.13	ICCC
7	Storage	HPE	HP MSA 2050	-	172.16.0.15	ICCC
8	Storage	HPE	HP MSA 2060	-	172.16.0.18	ICCC
9	Storage	HPE	HP MSA 2060	-	172.16.0.20	ICCC
10	SAN Switch Connectivity	HPE	SN3000B 24/12 FC	-	172.16.0.11	ICCC
11	SAN Switch Connectivity	HPE	SN3000B 24/12 FC	-	172.16.0.12	ICCC
12	Public WiFi	Mirotik	CCR1009-7G-1C-1S+	-	10.20.0.1	ICCC
13	AP Controller(WLC)	Cisco	CCR1009-7G-1C-1S+	-	10.0.0.4	ICCC
14	AP Controller(WLC)	Cisco	CCR1009-7G-1C-1S+	-		ICCC
15	GTPL Switch	huawei	A5735-L 32ST4X - A		10.43.0.254	ICCC
16	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.101	GEB Colony Crossroads
17	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.102	GEB Colony Crossroads
18	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.103	GEB Colony Crossroads
19	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.104	GEB Colony Crossroads
20	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.105	Pethapur Crossroads
21	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.106	Pethapur Crossroads
22	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.107	Pethapur Crossroads
23	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.108	Pethapur Crossroads
24	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.109	Randeja Crossroad
25	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.110	Randeja Crossroad

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
26	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.111	Randeja Crossroad
27	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.112	Randeja Crossroad
28	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.113	K-6
29	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.114	K-6
30	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.115	K-6
31	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.116	K-6
32	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.117	K-5
33	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.118	K-5
34	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.119	K-5
35	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.120	K-5
36	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.121	Reliance Crossroad
37	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.122	Reliance Crossroad
38	Network Switch	DIGISOL	DG-IS4510HPE	2.0.2G Build 99967	172.16.12.123	Reliance Crossroad
39	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.124	Reliance Crossroad
40	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.125	K-7
41	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.126	K-7
42	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.127	K-7
43	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.128	K-7
44	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.129	KH-7
45	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.130	KH-7
46	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.131	KH-7
47	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.132	KH-7
48	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.133	Vasana Hadmathiya (KH-0.5)

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
49	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.134	Vasana Hadmathiya (KH-0.5)
50	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.135	Vasana Hadmathiya (KH-0.5)
51	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.136	Vasana Hadmathiya (KH-0.5)
52	Network Switch	DIGISOL	DG-IS4510HPE	2.0.2G Build 99967	172.16.12.137	CHH-6
53	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.138	CHH-6
54	Network Switch	DIGISOL	DG-IS4510HPE	2.0.2G Build 99967	172.16.12.139	CHH-6
55	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.140	CHH-6
56	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.141	CHH-4A
57	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.142	CHH-4A
58	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.143	CHH-4A
59	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.144	CHH-4A
60	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.145	KH-0
61	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.146	KH-0
62	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.147	KH-0
63	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.148	KH-0
64	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.149	KH-0
65	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.150	GH-0
66	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.151	GH-0
67	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.152	GH-0
68	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.153	GH-0
69	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.154	GH-0
70	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.155	Sarita Udhyan (J-3)
71	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.156	Sarita Udhyan (J-3)

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
72	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.157	Sarita Udhyan (J-3)
73	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.158	Sarita Udhyan (J-3)
74	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.159	CH-7
75	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.160	CH-7
76	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.161	CH-7
77	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.162	CH-7
78	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.163	G road (G2 to G3)
79	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.164	KH road (KH-1 to KH-2)
80	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.165	Uvarsad to Vavol Road
81	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.166	KH-0 to Reliance
82	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.167	Gh-0 to Reliance Crossroad
83	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.168	J3 to J4
84	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.169	GH-7 to CH-7
85	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.170	CHH-4B to Jill Panchayat
86	Network Switch	DIGISOL	DG-IS4510HPE	2.0.2G Build 99967	172.16.12.173	Randheja
87	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.174	Pethapur
88	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.175	Vasana Hadmatiya
89	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.176	Sargasan
90	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.177	Kolavada
91	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.179	Por
92	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.180	Kudasan
93	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.181	Randesan
94	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.182	Rayasan

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
95	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.50	Bhat
96	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.2	Koteshwar
97	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.66	Ambapur
98	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.186	Dholakuva
99	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.187	Indroda
100	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.188	New Sargasan-1
101	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.189	New Sargasan-2
102	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.190	New Kudasan, Near Prominate Hotel
103	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.191	Palaj
104	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.192	Between GEB croassroad to Pethapur crossroad
105	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.193	Pethapur Market
106	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.194	K4 (Beside Hotel Lila)
107	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.195	Kudasan-3(Opp. Vrundavan Hotel)
108	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.146	Zundal Narmada canal
109	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.147	Zundal Narmada canal
110	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.98	Sughad Narmada canal
111	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.99	Sughad Narmada canal
112	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.82	Koba Circle to Apollo Canal Bridge
113	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.83	Koba Circle to Apollo Canal Bridge
114	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.206	Kudasan Near Legends of Punjab Hotel
115	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.207	G-0 Near RTO
116	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.18	Near Koba Lake
117	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.209	Sargasan Villlage Entry

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
118	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.34	Zundal Near Gate 2
119	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.130	Adalaj Cannal(S G highway Cannal)
120	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	10.43.3.131	Adalaj Cannal(S G highway Cannal)
121	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.213	Vavol Square Near Mandir
122	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.214	Reliance Crossroad
123	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.215	New ICCC
124	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.12.216	KH-0
125	Network Switch	techroute	TR-IES-2510-P	1.1.0.1 (build-4.115)	172.16.12.217	Catel House
126	Network Switch	DIGISOL	DG-GS1510PL	4.3.8	172.16.12.218	Catel House
127	Network Switch	techroute	TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.12.219	Catel House
128	Network Switch	techroute	TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.12.220	Catel House
129	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.51	g-3 smartpole to atcs
130	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.54	GMC 4th Floor
131	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.55	Akshardham
132	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.56	KH-4 B
133	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.57	KH-4 B
134	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.58	KH-5
135	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.59	G-3
136	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.60	KH-3
137	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.61	KH-4 A
138	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.62	KH-4 A
139	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.63	KH-4 A
140	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.64	KH-4 B

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
141	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.65	KH-4 B
142	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.66	KH-4 B
143	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.67	KH-5
144	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.68	KH-5
145	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.69	KH-5
146	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.70	KH-3
147	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.71	KH-3
148	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.72	KH-3
149	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.74	KH-6
150	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.75	KH-6
151	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.76	G-2
152	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.77	G-2
153	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.78	G-2
154	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.79	G-3
155	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.80	G-3
156	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.81	G-3
157	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.82	G-5
158	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.83	G-5
159	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.84	G-5
160	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.85	G-6
161	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.86	G-6
162	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.87	G-6
163	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.88	Ch-4 A

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
164	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.89	Ch-4 A
165	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.90	Ch-4 A
166	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.91	Akshardham
167	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.92	Akshardham
168	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.93	Akshardham
169	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.94	KH-5 Circle sw
170	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.95	KH-5 Circle sw
171	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.96	KH-6 Circle sw
172	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.97	KH-6 Circle sw
173	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.98	G-6 Circle sw
174	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.99	G-6 Circle sw
175	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.100	G-5 Circle sw
176	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.102	Kh-1
177	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.103	Ch-3
178	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.104	kh-2
179	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.106	G-2
180	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.107	G-2
181	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.108	GH-2
182	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.109	GH-3
183	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.110	Ch-4b
184	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.112	KH-6
185	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.115	Ch-3
186	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.116	Ch-3

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
187	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.117	Ch-3
188	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.119	NewGMC
189	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.120	GH-2.5
190	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.121	Ch-5
191	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.122	Ch-5
192	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.123	Ch-5
193	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.124	Ch-3-circle
194	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.125	Ch-3-circle-2
195	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.126	GH-6
196	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.129	GH-5
197	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.130	GH-5
198	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.131	Gh-3
199	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.132	Gh-3
200	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.133	SWM
201	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.134	GH-3 Circle
202	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.136	CH-6
203	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.137	CH-5 circle sw-1
204	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.138	CH-5 circle sw-2
205	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.139	GH-2 circle sw-1
206	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.140	GH-2 circle sw-2
207	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.141	GH-2 circle sw-3
208	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.142	GH-2 circle sw-4
209	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.151	Between CH-5 to CH-6

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
210	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.152	Between GH-3 to GH-4
211	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.154	GH-3 Circle
212	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.155	GH-3 Circle
213	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.156	Between GH-5 to GH-6
214	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.157	GH-6 Circle
215	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.158	GH-5 To GH-4 SW
216	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.161	KH-5
217	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.162	Civil Hospital
218	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.163	CHH-6
219	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.164	Old Sachivalay
220	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.165	KH-0
221	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.166	GH-6
222	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.167	K-7
223	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.168	Gh-3
224	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.170	Sector-1 garden
225	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.171	Gh-1
226	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.172	CHH-4A
227	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.173	K-6
228	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.174	Sector-28 Garden
229	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.175	Sector-28 Garden
230	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.176	Sector-28 Garden
231	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.177	Sector-28 Garden
232	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.178	Sector-28 Garden

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
233	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.179	Sector-28 Garden
234	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.180	Sector-28 Garden
235	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.181	Sarita
236	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.182	Sarita
237	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.183	Sarita
238	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.184	Sarita
239	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.185	Sector-7 Garden
240	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.186	Sector-24 Garden
241	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.187	Sector-27 Garden
242	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.188	Sector-16 Rangmanch
243	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.189	Sector-20 Rangmanch
244	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.190	Sector-22 Rangmanch
245	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.191	Sector-28 Rangmanch
246	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.192	Sector-29 Rangmanch
247	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.193	Sector-30 Rangmanch
248	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.194	Gh-2
249	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.195	Relience Chockdi
250	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.196	Sector-28 Garden
251	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.197	Sector-22 Shopping Mall
252	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.198	Sector-6 Shopping mall
253	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.199	Sarita Udhyan
254	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.200	G-6
255	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.201	Ch-5

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
256	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.202	G-3 Smart Pole
257	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.203	G-5
258	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.204	G-1
259	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.205	KH-3
260	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.206	CH-6
261	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.207	GH-5
262	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.208	K-5
263	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.209	GH-7
264	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.210	GH-7
265	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.211	GH-7
266	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.212	CH-3 Way-2
267	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.213	GH-2 Sector 3
268	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.214	GH-2 Sector 7
269	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.215	GH-4 Towords Ahmedabad
270	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.216	GH-4 Towords GH-5
271	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.217	GMC ICCC-WifI/Camera SW
272	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.218	GMC 4th Floor SW
273	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.219	GMC 1st Floor SW-1 WIFI
274	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.220	GMC 1St Floor SW-2 Camera
275	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.221	Akshardham Smart_Pole SW
276	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.222	Indroda_Park Smart_Pole SW
277	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.223	Infocity Smart_Pole SW
278	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.224	Sec-7_Shopping Smart_Pole SW

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
279	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.225	CH-0 Smart_Pole SW
280	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.226	Raksha_Shakti Smart_Pole SW
281	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.227	G-7 Smart_Pole SW
282	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.228	Ch-4 B
283	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.229	GMC Second_Floor CAM SW
284	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.231	CH-3
285	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.232	GH-7 Circle
286	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.233	GH-7 Circle
287	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.234	GH-2
288	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.236	GH-5
289	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.241	Ground Floor
290	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.242	New GMC
291	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.243	Sector-28 Garden SP
292	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.244	CH-3 WAY-3 Side SW
293	Network Switch	DIGISOL	DG-IS4510HPE	2.0.2G Build 99967	172.16.4.245	New GMC
294	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.246	GMC_Second floor_Camera
295	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.247	New GMC Ground floor SW
296	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.248	New GMC 3rd Floor SW-1
297	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.249	New GMC 3rd Floor
298	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.250	New GMC 1st Floor SW-1
299	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.251	New GMC Ground floor SW-2
300	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.252	New GMC Ground floor SW-1
301	Network Switch	TECHROUTE	TECHROUTE TR-IES-2512-P	1.1.0.1 (build-4.115)	172.16.4.253	New GMC 3rd Floor SW-2

Network Devices						
Sl. No.	**IP Enabled devices**	**Make**	**Model**	**Version Number**	**IP address**	**Location**
302	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.0.245	ICCC_Camera_Switch
303	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.0.246	ICCC_Camera_Switch
304	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.0.247	ICCC_Bio Metric_Switch
305	Network Switch	techroute	TR-IES-2510-P	1.4.15.705 (build-282)	172.16.0.248	ICCC_Camera_Switch(Right)

Servers					
Sl. No.	**Server Role**	**Hostname**	**Operating System**	**IP**	**Location**
1	RLVD APP	GMCSRV01	Windows 2016	172.16.0.51	ICCC
2	RLVD BD	GMCSRV02	Windows 2016	172.16.0.52	ICCC
3	VMS Recocrder-1	GMCSRV03	Windows 2016	172.16.2.211	ICCC
4	VMS Recocrder-2	GMCSRV04	Windows 2016	172.16.0.54	ICCC
5	VMS Managment	GMCSRV05	Windows 2016	172.16.0.55	ICCC
6	GMCSRV06	GMCSRV06	Windows 2016	172.16.0.56	ICCC
7	VMS Recocrder-3	GMCSRV07	Windows 2016	172.16.0.57	ICCC
8	ATCS(SmartPole)	GMCSRV08	Windows 2016	172.16.0.58	ICCC
9	Cisco Prime VM	GMCSRV09	Windows 2019	172.16.0.59	ICCC
10	VMS Recocrder-4	GMCSRV10	Windows 2016	172.16.0.60	ICCC
11	ICCC,Oizom,ATCS DB	GMCSRV11	Windows 2019	172.16.0.53	ICCC
12	DHCP	SRV009VM4	Windows 2016	10.0.0.16	Virtual Machine
13	ATCS APP	SRV009VM5	Windows Server 2016 Standard	172.16.0.81	Virtual Machine
14	VMS API	SRV009VM_VMS	Windows Server 2016 Standard	172.16.0.83	Virtual Machine
15	Prime	SRV009VM7	Cisco Prime 3.10	10.0.0.19	Virtual Machine
16	Coral -Help Desk Ticketing(Mail_SRV)	SRV008VM4	Cent OS Version 7	172.16.0.207	Virtual Machine

Servers					
Sl. No.	**Server Role**	**Hostname**	**Operating System**	**IP**	**Location**
17	SMart Pole	SRV008VM3	Windows Server 2016 Standard	172.16.0.50	Virtual Machine
18	RLVD-Event Aggrigation	SRV008VM5	UBUNTU 20.04	172.16.0.85	Virtual Machine
19	Linux OS	SRV007VM3	UBUNTU 20.04	172.16.0.49	Virtual Machine
20	NTP	SRV007VM4	Cent OS	172.16.0.31	Virtual Machine
21	Active Directory	SRV006VM2	Windows 2016	172.16.0.32	Virtual Machine
22	Anti Virus(Seqrite Endpoint Security0	SRV006VM3	Windows 2016	172.16.0.97	Virtual Machine
23	ITMS Master & Database Server	GMCSRV010__1VM1	UBUNTU 20.04	172.16.0.84	Virtual Machine
24	Echallan	SRV010VM2	UBUNTU 20.04	172.16.0.86	Virtual Machine
25	Dashboard	SRV010VM3	UBUNTU 20.04	172.16.0.87	Virtual Machine
26	Outline Application	VM1_GMC_ICCC_APP	UBUNTU 20.04 LTS	172.16.0.88	Virtual Machine
27	Outline Database	VM1_GMC_ICCC_DB	UBUNTU 20.04 LTS	172.16.0.89	Virtual Machine
28	Oizom DB	VM5_OIZOM_DB_NEW	UBUNTU 18.04.6	172.16.0.95	Virtual Machine
29	Oizom APP	VM3_OIZOM_APP	UBUNTU 18.04.6	172.16.0.96	Virtual Machine
30	Syncnex Database	VM6_ATCS_DB	UBUNTU 20.04.3 LTS	172.16.0.82	Virtual Machine
31	junctionserver	01_junctionserverweb	Windows 2016	10.0.1.203	On AWS
32	OIZOM API	01_OIZOM API WEB	Linux Ubuntu 18.04.1	10.0.1.6	On AWS
33	OIZOM API	01_OIZOM API DB	Linux Ubuntu 18.04.1	10.0.3.171	On AWS
34	SmartSteetLight	01_SmartSteetLight_WEB	Windows 2016	10.0.1.116	On AWS
35	ITMS_PIS_WEB	01_GMC_ITMS_PIS_WEB	Linux	10.0.1.87	On AWS
36	ITMS_PIS_DB	01_GMC_ITMS_PIS_DB	CentOS Linux 7	10.0.3.44	On AWS
37	Motadata	GMC_DC_Motadata_Master	Ubuntu 20.04.5 LTS	10.0.1.174	On AWS
38	Motadata	GMC_DC_motadata-datanode	Ubuntu 20.04.5 LTS	10.0.3.141	On AWS

Servers					
Sl. No.	**Server Role**	**Hostname**	**Operating System**	**IP**	**Location**
39	SWM_APP	01_SWM_APP	Windows 2016	10.0.1.210	On AWS
40	PA & ECB	01_PA & ECB	Windows 2016	10.0.1.73	On AWS
41	giserpwin	01_GIS Web	Windows 2016	10.0.2.71	On AWS
42	jumpbox	01_nginxtest	Linux	172.31.5.231	On AWS
43	ITMS_PIS_DB	01_ITMS_PIS_DB_DR	CentOS Linux 7	10.0.4.35	On AWS
44	ITMS_PIS_WEB	01_ITMS_PIS_WEB_DR	Windows 2016	10.0.2.30	On AWS
45	junctionserver	01_junctionserverdb	Windows 2016	10.0.3.133	On AWS
46	ITMS_PIS_WEB	01_GMC_ERP	CentOS Linux 7	10.0.1.34	On AWS
47	GMC_VAPT_DB_NEW	01_SmartSteetLight_DB_N	UBUNTU 20.04.3 LTS	10.0.3.5	On AWS
48	Motadata	Motadata_service_desk_new	Linux Ubuntu 18.04.1	10.0.2.238	On AWS
49	ITMS_PIS_DB	01_SLS_Dongle	CentOS Linux 7	10.0.2.162	On AWS
50	GMC_ERP_WEB_Server	01_GMC_BG_Manager	Windows 2019	10.0.1.253	On AWS
51	GMC_ERP_WEB_Server	01_SWM_DB_N_11032022	Linux Ubuntu 18.04.1	10.0.3.108	On AWS
52	GMC_ERP_WEB_Server	01_ATCS_Database_DR(Phase-2)	Linux Ubuntu 18.04.1	10.0.3.150	On AWS
53	GMC_ERP_WEB_Server	01_ATCS_APP_DR(Phase-2)	Windows 2019	10.0.1.242	On AWS
54	01X_KOTAK_30_06_23	01X_KOTAK_30_06_23	Windows 2019	10.0.2.138	On AWS
55	pbx server-1	pbx server-1	Linux Debian	172.16.0.201	ICCC
56	pbx server-2	pbx server-2	Linux Debian	172.16.0.202	ICCC
57	pbx server-3/main (Virtual getway)	pbx server-3/main (Virtual getway)	Linux Debian	172.16.0.203	ICCC
58	Call Center server-1	Call Center server-1	Linux Debian	172.16.0.204	ICCC
59	Call Center server-3/Main (Virtual Getway)	Call Center server-3/Main (Virtual Getway)	Linux Debian	172.16.0.206	ICCC
60	PA & ECB	VINGTOR STENTOFON	AlphaCom XE1	172.16.0.91	ICCC

Servers					
Sl. No.	**Server Role**	**Hostname**	**Operating System**	**IP**	**Location**
61	PA & ECB	VINGTOR STENTOFON	AlphaCom XE1	172.16.0.92	ICCC

43.5 Web Application Details

43.5.1 ATCS

Name of Web Application under Assessment	Adaptive Traffic Control System (ATCS)
Language of the Website	English
	Regional Language
Developer of the Web Application and Contact Details	Efftronics/Amnex Infotechnologies Pvt. Ltd
Staging / Temporary URL	Not Applicable
Production URL	https://gscdlatcs.gandhinagarsmartcity.in/atcs/accounts/login
	https://gscdlsyncnex.gandhinagarsmartcity.in/
Application will be hosted on	On Cloud /Virtual Machine
Operating System Details	Windows Server 2016 Standard
Web/Application Server with Version	IIS, IIS (Version 10.0.14393.0)
Server-side Scripts	Dashboard D:\ApplicationBackups_Syncnex\Publish_2022_11_25\Publish\assets\js\dashboard.js
Client side scripts/files	Incident D:\ApplicationBackups_Syncnex\Publish_2022_11_25\Publish\assets\js\incident.js
	https://gscdlsyncnex.gandhinagarsmartcity.in/Dashboard/Dashboard
	https://gscdlsyncnex.gandhinagarsmartcity.in/IncidentManageMaster/IncidentManageMaster
	https://gscdlsyncnex.gandhinagarsmartcity.in/IncidentDashboard/IncidentDashboardNew
Backend Database	postgresql, PostgreSQL (PGAdmin 4 Version 6.4)
Whether any CMS is there?	NA

Total Size of the Website in MB or in no. of pages	/206
Total no. of form available for user input(s)	/No. of Forms: 25
User's role(s) of the Web Application	/1) Product Admin, 2) Only View, 3) Traffic Department, 4) Normal User
Is there any payment gateway?	NA
Associated web service details, if any	/Nill
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in which it is installed (i.e. Public/Private)	Public
OEM/Supplier name and Country of origin	OEM-Efftronics/ Amnex
	name and Country
[Manufacture details of Device/Software/ Service]	*of origin*-India
	Manufacture details-Services

43.5.2 ITMS

Name of Web Application under Assessment	ITMS applications enables tracking of city buses through GPS (ITMS)
Language of the Website	English
	Regional Language
Developer of the Web Application and Contact Details	Amnex Info Technologies Pvt. Ltd
Staging / Temporary URL	Not Applicable
Production URL	https://gscdlavls.gandhinagarsmartcity.in/

Application will be hosted on	On Cloud
Operating System Details	UBUNTU 20.04
Web/Application Server with Version	nginx
Server-side Scripts	NA
Client side scripts/files	NA
Backend Database	postgresql
Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	NA
Total no. of form available for user input(s)	NA
User's role(s) of the Web Application	NA
Is there any payment gateway?	NA
Associated web service details, if any	/Nill
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in which it is installed (i.e. Public/Private)	Public
OEM/Supplier name and Country of origin	OEM- Amnex *name and Country*
[Manufacture details of Device/Software/ Service]	*of origin*-India *Manufacture details-Services*

43.5.3 Smart Pole

Name of Web Application under Assessment	(Smart Pole) Smart Pole has various components such as Environment Sensors, PTZ camera, Variable Messaging Boards, Streetlight, Panic Button and WiFI.
Language of the Website	English Hindi

	Regional Language
Developer of the Web Application and Contact Details	Amnex Info Technologies Pvt. Ltd
Staging / Temporary URL	
Production URL	https://gscdlsp.gandhinagarsmartcity.in/
Application will be hosted on	On Cloud
Operating System Details	Windows Server 2016 Standard
Web/Application Server with Version	IIS 10.0
Server-side Scripts	C# (ASP.NET) MVC
Client side scripts/files	HTML,JavaScript,CSS,jQuery,Bootstrap
Backend Database	PostgreSQL
Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	206
Total no. of form available for user input(s)	No. of Forms: 15
User's role(s) of the Web Application	Admin , Normal Users
Is there any payment gateway?	NA
Associated web service details, if any	http://182.237.15.200:8000/documentation/
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in which it is installed (i.e. Public/Private)	Public
OEM/Supplier name and Country	OEM- Amnex
of origin	*name and Country*
[Manufacture details of	*of origin*-India

Device/Software/ Service]	*Manufacture details-Services*

43.5.4 Smart Pole

Name of Web Application under Assessment	(SWM) Solid waste management application collecting data of Smart bins and vehicles live tacking
Language of the Website	English
	Hindi
	Regional Language
Developer of the Web Application and Contact Details	Amnex Info Technologies Pvt. Ltd
Staging / Temporary URL	
Production URL	https://gscdlswm.gandhinagarsmartcity.in/Login.aspx
Application will be hosted on	On Cloud
Operating System Details	Windows
Web/Application Server with Version	IIS 10.0.14393.0
Server-side Scripts	C#, aspx (web Forms)
Client side scripts/files	HTML, CSS, JavaScript
Backend Database	PostgreSQL
Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	484
Total no. of form available for user input(s)	No. of Forms: 22
User's role(s) of the Web Application	SuperAdmin, Ward User, Zone Representative, GMC Admin
Is there any payment gateway?	NA
Associated web service details, if any	NIL
Whether application has been audited earlier? If yes, year of last testing.	NA

Network type in which it is installed (i.e. Public/Private)	Public
OEM/Supplier name and Country	OEM- Amnex
of origin	*name and Country*
[Manufacture details of	*of origin*-India
Device/Software/ Service]	*Manufacture details-Services*

43.5.5 Help Desk (Public Grievance System)

Name of Web Application under Assessment	(Helpdesk) The public grievance system helps in capturing public complaints across various departments (aprox 20) lodged by citizens
Language of the Website	English
	Regional Language
Developer of the Web Application and Contact Details	Coral
Staging / Temporary URL	
Production URL	https://gmchelpdesk.gandhinagarsmartcity.in
Application will be hosted on	Virtual Machine
Operating System Details	UBUNTU 20.04
Web/Application Server with Version	Apache
Server-side Scripts	NA
Client side scripts/files	NA
Backend Database	MySQL
Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	NA
Total no. of form available for user input(s)	NA
User's role(s) of the Web Application	NA
Is there any payment gateway?	NA

Associated web service details, if any	NIL
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in which it is installed (i.e. Public/Private)	Public
OEM/Supplier name and Country	OEM-Coral Telecom
of origin	*name and Country*
[Manufacture details of	*of origin*-India
Device/Software/ Service]	*Manufacture details-Service*

43.5.6 Traffic Enforcement System

Name of Web Application under Assessment	(TES) Traffic Enforcement System captures red Light Violation and Speed Violations across the city to ensure safety
Language of the Website	English
	Regional Language
Developer of the Web Application and Contact Details	Secura, Videonetics
Staging / Temporary URL	
Production URL	http://gscdlrlvdsvd.gandhinagarsmartcity.in/admin /
	Application
Application will be hosted on	Physical and Virtual Machine
Operating System Details	WINDOWS, LINUX
Web/Application Server with Version	IIS, Java
Server-side Scripts	NA
Client side scripts/files	NA
Backend Database	MySQL,MySQL
Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	NA

Total no. of form available for user input(s)	NA
User's role(s) of the Web Application	NA
Is there any payment gateway?	NA
Associated web service details, if any	NIL
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in which it is installed (i.e. Public/Private)	Public/Private
OEM/Supplier name and Country	OEM-Lookman/Videonatics
of origin	*name and Country*
[Manufacture details of	*of origin*-India
Device/Software/ Service]	*Manufacture details-Service*

43.5.7 Environment Sensor

Name of Web Application under Assessment	(OIZOM - Environmental Sensor) The Web application displays the data of Outdoor Environmental Monitoring System. It is a Web-application to visualise and analyse the data from the device.
Language of the Website	English
	Regional Language
Developer of the Web Application and Contact Details	Environment sensors data - OIZOM
Staging / Temporary URL	N/A
Production URL	http://182.237.15.200:3000/#/login
Application will be hosted on	Virtual Machine/On Cloud
Operating System Details	Ubuntu 18.04
Web/Application Server with Version	Ngnix
Server-side Scripts	AngularJs for Application Development, NodeJS with Express.js framework as our backend.
Client side scripts/files	AngularJs for Application Development, NodeJS with Express.js framework as our backend.
Backend Database	Cassandra

Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	NA
Total no. of form available for user input(s)	No. of Forms: 10 or No. of Form Fields:
User's role(s) of the Web Application	Admin and Sub user
Is there any payment gateway?	NA
Associated web service details, if any	NIL
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in which it is installed (i.e. Public/Private)	Private
OEM/Supplier name and Country of origin [Manufacture details of Device/Software/ Service]	OEM-OIZOM *name and Country of origin*-India *Manufacture details-Service*

43.5.8 Street Light

Name of Web Application under Assessment	(Street Light) The Web application displays the Streetlights status, We can turn Off/On by the command and also check Panic button events.
Language of the Website	English
	Regional Language
Developer of the Web Application and Contact Details	Amnex Info Technologies Pvt. Ltd
Staging / Temporary URL	N/A
Production URL	https://gmc_streetlight.gandhinagarsmartcity.in/
Application will be hosted on	On Cloud
Operating System Details	Windows
Web/Application Server with Version	IIS 10.0
Server-side Scripts	NA

Client side scripts/files	NA
Backend Database	NA
Whether any CMS is there?	NA
Total Size of the Website in MB or in no. of pages	56
Total no. of form available for user input(s)	No. of Forms: 16
User's role(s) of the Web Application	Admin , Normal Users
Is there any payment gateway?	NA
Associated web service details, if any	NIL
Whether application has been audited earlier? If yes, year of last testing.	NA
Network type in	Public
which it is	
installed	
(i.e.	
Public/Private)	
OEM/Supplier name and Country	OEM-Amnex
of origin	*name and Country*
[Manufacture details of	*of origin*-India
Device/Software/ Service]	*Manufacture details-Service*