राजस्थान केन्द्रीय विश्वविद्यालय
Central University of Rajasthan

Category-I University

TENDER NOTICE & DOCUMENT FOR Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Central Control Room with 3 Years Comprehensive On-site Maintenance Contract at Central University of Rajasthan

CENTRAL UNIVERSITY OF RAJASTHAN

(Established under the Central Universities Act 2009)
Bandarsindri – 305817,Distt.:Ajmer, Rajasthan.
Website: www.curaj.ac.in

1. Schedule of Tender:

Tender document for Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Control Room with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan. Tenders are invited from the reputed OEM/Channel partners/authorized dealers/firms etc. for Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Control Room with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan with "**Part A" as Technical Bids and "Part B"** as Financial Bids. The details are as follows:

S. No	Item Description	Unit	Qty.
1.	SITC of 5MP or Higher Outdoor Motorized lens Bullet Camera with mounting fixture on outdoor 6 Mtr poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	95
2.	SITC of 5MP or Higher Outdoor Motorized lens Bullet ANPR Camera with mounting fixture on outdoor 6 Mtr. poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4
3.	SITC of 4MP or Higher Outdoor PTZ camera with mounting fixture 6 Mtr poles, including 512GB Class-10, SD Card (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4
4.	SITC of Unified VMS Software solution with perpetual (Lifetime) licenses with Failover function, scalable up to a thousand cameras, including 5 client viewing licenses, with 3 years onsite comprehensive warranty and maintenance support.	Set	1
5.	SITC of VMS software Camera perpetual (Lifetime) License for 300 Cameras with 3 years onsite comprehensive warranty and maintenance support.	Nos.	300
6.	SITC of VMS software, Desktop/Mobile Client perpetual (Lifetime) license with built-in Camera function, Mobile camera should be live view & Recording on VMS in the Main control room with 3 years onsite comprehensive warranty and maintenance support.	Nos.	10
7.	SITC of the ANPR Software perpetual (Lifetime) license with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4
8.	SITC of Video Management server with Failover for Up to 1000 cameras with edge video Analytics applications Processing functions with 3 years onsite comprehensive warranty and maintenance support.	Nos.	2
9.	SITC of Dual Controller Video Storage Server Appliance for 30 days of recording with a minimum of 480TB raw storage expandable up to 2 Petabytes of storage with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1

10.	SITC of PTZ Camera Control joystick Keyboard with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1
11.	SITC of Workstation for Client Monitoring & Video wall control - i9, 64GB, 2X480 GB SSD, 1xNvidia RTX 4070 Graphics card with 3 years onsite comprehensive warranty and maintenance support	Nos.	2
12.	SITC of Workstation for Client Monitoring - i7, 32GB, 480 GB SSD, with NVidia 6GB Graphics card with original Windows 11 Pro, including 21" or higher monitor with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
13.	SITC of Laptop - i7, 8GB, 480 GB SSD, with inbuilt 2GB Graphics with original Windows 11 Pro with 3 years onsite comprehensive warranty and maintenance support.	Nos	1
14.	SITC of LED Monitor, 55" 4K, 24x7 Rated for Control Room with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
15.	SITC of LED Monitor, 24" Full HD for Control Room with 3 years onsite comprehensive warranty and maintenance support.	Nos	2
16.	SITC of Network Switch, L2 Managed, 24 Port with 2SFP Port with 3 years onsite comprehensive warranty and maintenance support.	Nos	1
17.	SITC of 10G SFP Module should same make of the existing network L3 Switch with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
18.	SITC of L3 Network Switch, Managed, 24-Port with 3 years onsite comprehensive warranty and maintenance support.	Nos	1
19.	SITC of Network Switch, Managed, 8 Port, PoE, indutrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
20.	SITC of Network Switch, Managed, 4 Port, PoE, industrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.	Nos	40
21.	SITC of RF Wireless backhaul Radio with 3 years onsite comprehensive warranty and maintenance support.	Nos	12
22.	SITC of RF Wireless Base Station Radio with 3 years onsite comprehensive warranty and maintenance support.	Nos	7
23.	SITC of RF Wireless Base Station Sector antenna with 3 years onsite comprehensive warranty and maintenance support.	Nos	7
24.	SITC of RF Wireless CPE Radio with Integrated Antenna on outdoor poles with 3 years onsite comprehensive warranty and maintenance support.	Nos	58
25.	SITC of LFP battery-based DC 90VA outdoor UPS or higher for Field Devices, with a minimum of 1 hour. Battery Backup for connected devices with 3 years onsite comprehensive warranty and maintenance support.	Nos	58
26.	SITC of Pole Mount Outdoor Junction Box with Din-Rail Arrangement with 3 years onsite comprehensive warranty and maintenance support.	Nos	58
27.	SITC of Cat 6 Armoured STP LAN Cable including conduit and required fixtures with 3 years onsite comprehensive warranty and maintenance support.	Mtr	900
28.	Supply and fixing of 6 Meter Pole with foundation with 3 years	Nos	58

	onsite comprehensive warranty and maintenance support.		
29.	Works of Testing, Configuration, Firmware Update, IP Re-Allocation & Re-commissioning of the Existing Camera and Network Switches in the proposed system, including Works of OTDR Testing & rectification of any faults, including fiber splicing & pigtail as required in the Existing Optical Fiber cable backbone of the CUR Network & Works of Penta scanning & rectification of any faults in the existing Cat-6 cable LAN network, including repunching of I/O Modules & Patch Panels of the CUR network for existing cctv system.	Job	1
30.	Works of Unified Video Surveillance System and CCTV Control room Re-Commissioning, Software configuration, Customization & user training Services with Integration of the Existing Active & Passive ITC LAN System with the proposed Solution	Job	1
31.	Supply and laying of Electrical works with 3 years onsite comprehensive warranty and maintenance support as per actual measurement/requirement 31.1) Supplying of 3 X 2.5 sq. mm PVC insulated and PVC sheathed / XLPE, copper conductor armored power cable of 1.1 KV grade	RMT	6000 (Tentative)
	31.2) Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Nos.	60 (Tentative)
	31.3) Supplying and fixing 20 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole and neutral.	Nos.	60 (Tentative)
32.	Providing and carrying out Civil work including laying/ excavation/digging work in all types of as per actual measurement/requirement with 3 years onsite comprehensive warranty and maintenance support 32.1) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation and refilling the trench etc as required.(3 X 2.5 sq. mm)	RMT	4500 (Tentative)
	32.2) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on the existing poles/wall as required. (3 X 2.5 sq. mm)	RMT	1500 (Tentative)
	32.3) Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Nos	60 (Tentative)
33.	Resident one engineer (Skilled) for 3 years onsite maintenance support	Months	36

Amount of EMD (Rs.) = 6,60,000.00
Tender Fee- Rs. 1,000/-

Tender Document upload (publish) date/time	:	22.12.2025
Pre-bid meeting	:	05.01.2026
Last Date of Submission of Tender	:	12.01.2026
Date of opening of Tender (Technical Bid)	:	13.01.2026

Type of Tender: Two Bid Systems. (Rule 163 GFR 2017)

Mode of EMD and Tender fee: Bidders should send separate Account Payee Demand Draft/Fixed deposit receipt/Banker's Cheque for Tender Fee (if applicable). For EMD, Account Payee Demand Draft/Fixed deposit receipt/Banker's Cheque/ Bank Guarantee from any of the Commercial Banks/payment online in an acceptable form in favor of "Registrar, Central University of Rajasthan" payable at Kishangarh/ Bandarsindri Distt. Ajmer.

University Bank Account details
Account Name: Central University of
Rajasthan Name of Bank: Bank of India
Account Number: 666110210000003
IFSC: BKID0006667

NOTE:

1. Tender number, its submission date and Name of the Tender should be mentioned,
2. If the tender is not opened on the above notified date, (due to any unforeseen circumstances), then the next working day will be considered as tender opening date.
3. The bidders who fail to submit the required tender fee, (if applicable) and EMD, their bids will not be considered for opening.

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2. TENDER NOTICE

Tender Notice for Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Control Room with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan

Central University of Rajasthan
NH-8 Bandarsindri, Kishangarh, Distt-Ajmer-305817
Tel: 01463 – 257515 Website www.curaj.ac.in.

Tender No. CURAJ/Purchase/2025-26/3157 **Date: 19.12.2025**

TENDER NOTICE

Bids are invited on CPP Portal from the Manufacturers, Authorized Channel Partners/ Dealers/Firms for the Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Control Room with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan.

Bids completed in all respects along with technical and price bids should be uploaded on CPP Portal on or before **2:00 PM, 12.01.2026.** Technical Bids will be opened on 13.01.2026 **at CPPP Portal.** For further details, please visit our website **www.curaj.ac.in** and CPP Portal i.e. https://eprocure.gov.in

राजस्थान केंद्रीय विश्वविद्यालय में वायरलेस आउटडोर सीसीटीवी निगरानी प्रणाली तथा एकीकृत सीसीटीवी कंट्रोल रूम की आपूर्ति स्थापना परीक्षण एवं कमीशनिंग तथा 3 वर्षों के व्यापक ऑन–साइट मेंटेनेंस कॉन्ट्रैक्ट हेतु निविदा सूचना

रामस्थान केन्द्रीय विश्वविद्यालय
एन0एच008 बांदरसिंदरी किशनगढ़, जिला अजमेर।
01463–257515
Website www.curaj.ac.in.

टेण्डर न. सी0यू0राज0 / क्रय / 2025–26 / 3157 19.12.2025

निविदा सूचना

राजस्थान केंद्रीय विश्वविद्यालय में **वायरलेस आउटडोर सीसीटीवी निगरानी प्रणाली तथा एकीकृत सीसीटीवी कंट्रोल रूम** की आपूर्ति, स्थापना, परीक्षण एवं कमीशनिंग तथा **3 वर्षों के व्यापक ऑनसाइट मेंटेनेंस कॉन्ट्रैक्ट-** हेतु **निर्माताओं, अधिकृत चैनल पार्टनर्सफर्मों/डीलर्स/** से **सीपीपी पोर्टल** के माध्यम से निविदाएँ आमंत्रित की जाती हैं।

सभी दृष्टि से पूर्ण तकनीकी एवं मूल्य निविदाएँ **सीपीपी पोर्टल** पर **दिनांक 12.01.2026 को अपराह्न 2:00 बजे तक** अपलोड की जानी चाहिए। **तकनीकी निविदाएँ दिनांक 13.01.2026 को सीपीपीपी पोर्टल पर खोली जाएँगी।**

अधिक विवरण हेतु कृपया विश्वविद्यालय की वेबसाइट www.curaj.ac.in तथा **सीपीपी पोर्टल**)https://eprocure.gov.in) देखें।

3. Important Notes to the Bidder:

1. Central University of Rajasthan, Bandarsindri, invites tenders under "2 Bid system" Supply, Installation,Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV ControlRoom with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan as per the specifications given in the "Annexure A".
2. Tender document can be downloaded from the University website at URL Link: http://www.curaj.ac.in/tenders. or Central Public Procurement Portal (CPP) at www.eprocure.gov.in.
3. The bidders are requested to read the tender document carefully and ensure all the compliance with instructions there in. Non-compliance of the instructions contained in this document, may disqualify the bidders from the tender process.

   Envelope containing appropriate Earnest Money Deposit (EMD) in the form of Demand Draft in favor of CENTRAL UNIVERSITY OF RAJASTHAN payable at Bandarsindri, Kishangarh/Madanganj should be sent to:

   The Registrar
   Central University of
   Rajasthan N.H.-8, Jaipur-
   Ajmer Highway,
   Bandarsindri, Kishangarh,Distt.
   Ajmer, Rajasthan- 305817

   Tender shall be rejected if the Earnest money in the form of D.D.'s is not found in proper order.
4. Bidders are required to upload photocopy of cheque & NEFT Bank Details with tender /quotation to enable us to making payment through on line transfer, for refund of EMD.
5. Any clarification regarding tender specification before submission of tender document can be discussed with the Officer Incharge (Purchase) 01463-257515 or through email id at oic.purchase@curaj.ac.in.

Registrar
CENTRAL UNIVERSITY OF RAJASTHAN
Bandarsindri, Rajasthan

CENTRAL UNIVERSITY OF RAJASTHAN

Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Central Control Room with 3 Years Comprehensive On-site Maintenance Contract at Central University of Rajasthan

4. SCOPE OF WORK AND ADDITIONAL TERMS & CONDITIONS (ATC)

(All the points of this scope of work & STC should be accepted and certified by bidder/OEM on letter head)

1. Scope of Work and Introduction

a. The Central University of Rajasthan is NAAC A++ Accredited and Category – I university with campus spread across 518 acres of land having 12 schools, 32 Departments, Separate hostels for boys and girls, staffs quarters etc.

b. Central University of Rajasthan (CURAJ) is rapidly evolving into a major academic and research hub with extensive infrastructure spanning academic buildings, hostels, residential facilities, administrative blocks, sports complexes, libraries, laboratories, public squares, and large outdoor areas. The campus covers a geographically wide area characterized by long distances between buildings, open fields and multiple under-construction zones.

c. The scope of work includes the design, supply, installation, testing, commissioning, and maintenance of Wireless CCTV Surveillance System to cover all designated outdoor areas of the university campus. The system shall ensure real-time monitoring, recording, playback, and centralized management of all installed new and existing cameras through a unified Video Management System (VMS). Bidder shall maintain and provide Comprehensive Onsite maintenance of proposed Wireless CCTV Surveillance System as per the tender terms and conditions.

d. At present, the University currently operates approximately 200 indoor CCTV cameras that were installed over various phases. These systems, though functional at their individual locations, operate through distributed recording systems of varying vintages, fragmented storage solutions, and limited monitoring capabilities. As a result, CURaj looking for unified security architecture that can centrally monitor, record, analyse, store, and retrieve footage across all departments and locations. The existing system does not provide integrated situational awareness or comprehensive coverage of critical roadways, junctions, campus boundaries, or rapidly developing construction sites.

e. CURAJ plans to deploy approximately 103 new IP-based bullet, PTZ & ANPR cameras, strategically placed across blind spots, roads, perimeters, public areas, and high-footfall zones. Also, 4 specialized ANPR cameras will be installed at key entry and exit gates to enable automated vehicle monitoring, entry/exit management, traffic discipline, and campus access control. Moreover, all 200 existing cameras will be migrated into a new centralized, highly scalable Video Management System (VMS) with unified storage, and monitoring capabilities.

f. Given the campus large physical scale and the high cost and difficulty of laying optical fibre cable (OFC) across remote or hard-to-reach locations, CURAJ aims to deploy a hybrid RF + OFC. This combines the reliability of OFC where available with the flexibility and rapid-deployment capability of RF Point-to-Multipoint (PTMP) and Point-to-Point (PTP) wireless backhaul networks for remote and open-area connectivity. The RF backbone also eliminates the delays and civil challenges associated with trenching and fiber-laying in rocky terrain or construction zones.

g. **The key objective for the new surveillance system includes:**

i. **End-to-end Surveillance Coverage:**

The system will cover roads, internal junctions, pedestrian walkways, open public courtyards, bus stops, parking areas, sports zones, perimeters, and construction sites—areas previously unmonitored or inadequately covered as approved by Engineer-in-charge.

ii. **Centralized Monitoring & Storage:**
A unified VMS and centralized storage infrastructure will replace distributed NVRs, enabling consistent retention, uniform access control, and centralized incident handling.

iii. **Wireless RF Network Backbone:**
The RF-based network provides flexibility and scalability, enabling rapid installation of cameras in remote/open areas where OFC deployment is not feasible or economically viable.

iv. **Scalability for Future Expansion:**
The new surveillance system is architected to support 1,000+ cameras, ensuring longevity and future-readiness as the University grows.

v. **Improved Safety & Security:**
Enhanced monitoring safeguards of students, faculty, residents, visitors, staff, and others by providing 24×7 surveillance

vi. Scalable Campus-Wide Surveillance Infrastructure
Deployment of approximately (100+ new and 200 existing cameras with capacity to expand up to 1,000 cameras without changes in core architecture.

vii. Unified VMS Platform for Old & New Cameras
All existing approximately 200 cameras will be migrated and standardized within the new VMS and storage ecosystem to ensure uniform retention, naming, access control, and monitoring.

viii. High-Capacity Wireless Backhaul
RF PTMP and PTP solutions will enable reliable communication between camera clusters, buildings, and reducing dependence on physical fibre and ensuring fast deployment.

ix. ANPR-Based Vehicle Monitoring
Installation of 4 ANPR cameras key entry and exit gates to enable automated vehicle monitoring.

2. SCOPE OF WORK – DETAILED REQUIREMENTS

The bidder shall provide a complete turnkey solution, including supply, installation, integration, configuration, testing, and commissioning of a campus-wide hybrid CCTV surveillance system supporting up to 1,000 cameras. The core elements include:

- Approximately 100+ new IP cameras (bullet/PTZ/ANPR cameras)
- Integration of approximately 200 existing cameras
- RF wireless backbone (PTMP + PTP)
- Enterprise VMS + scalable storage architecture
- All necessary poles, mounting fixtures for cameras, RF Radios junction boxes, cabling, accessories, connectors, civil work, electrical work etc. to make entire CCTV Surveillance system functional.
- Tentative New Outdoor Camera Location for Wireless CCTV Surveillance

Sr. No.	Camera Location	Camera Type	Qty
1.	Main Gate number -1	ANPR 5 MP	2
2.	Flag Point Circle -1	Bullet 5 MP	3
3.	Admin Building - Front Side	Bullet 5 MP	2
4.	Admin Building - Front Side	PTZ 4 MP	1
5.	Admin Building - Back Side	Bullet 5 MP	1
6.	Between 4A5&4A6 front side Road	Bullet 5 MP	2
7.	Between 4A5&4A6 Back side Road	Bullet 5 MP	3
8.	Between 4A3&4A4 front side Road	Bullet 5 MP	2
9.	Between 4A3&4A4 Back side Road	Bullet 5 MP	3
10.	Front & Back Side Entry & Exit 4A5	Bullet 5 MP	2
11.	Front & Back Side Entry & Exit 4A6	Bullet 5 MP	2
12.	Front & Back Side Entry & Exit 4A3	Bullet 5 MP	2
13.	Front & Back Side Entry & Exit 4A4	Bullet 5 MP	2
14.	CIL Building Entrance	Bullet 5 MP	1

15.	Circle -2	Bullet 5 MP	3
16.	Circle -3	Bullet 5 MP	3
17.	Gate Number -2	Bullet 5 MP	2
18.	STP Plant	Bullet 5 MP	2
19.	Gate Number -3	ANPR 5 MP	2
20.	T Point between Circle-3 to KV T Point	Bullet 5 MP	3
21.	KV Point Near pond	Bullet 5 MP	2
22.	Near KV T Point	Bullet 5 MP	3
23.	Near BOI & canteen area	Bullet 5 MP	3
24.	Near Girls Hostel-2 Y-Point	Bullet 5 MP	2
25.	Near Girls Hostel-4 L-Point	Bullet 5 MP	2
26.	Near Tennis court	Bullet 5 MP	2
27.	Near Girls hostel-1 Front side T- Point	Bullet 5 MP	2
28.	Mega Mess	Bullet 5 MP	2
29.	Boys Hostel -B5 Front	Bullet 5 MP	1
30.	Boys Hostel -B5 Back	Bullet 5 MP	1
31.	Boys Hostel -B6 Front	Bullet 5 MP	1
32.	Boys Hostel -B6 Back	Bullet 5 MP	1
33.	Boys Hostel -B7 Front	Bullet 5 MP	1
34.	Boys Hostel -B7 Back	Bullet 5 MP	1
35.	SP Circle near B-5 Hostel	Bullet 5 MP	3
36.	Near Auditorium	Bullet 5 MP	1
37.	SP-2/Library Entrance	Bullet 5 MP	1
38.	T-Point Near the Football playground	PTZ 4 MP	1
39.	L-Point Near the Football playground	Bullet 5 MP	2
40.	Between Hockey & Cricket Playground	Bullet 5 MP	2
41.	Helipad Area	PTZ 4 MP	1
42.	Power Sub Station 2	Bullet 5 MP	1
43.	B-8 Boys Hostel Entrance	Bullet 5 MP	1
44.	Type B QtR -T Junction	Bullet 5 MP	3
45.	Front of Type B-QTR	Bullet 5 MP	1
46.	Entrance of Yoga Building	Bullet 5 MP	1
47.	T-Point of VC Residence	Bullet 5 MP	2
48.	Circle -4	Bullet 5 MP	3
49.	Water Tank House	Bullet 5 MP	1
50.	Power House	Bullet 5 MP	1
51.	Power Sub Station 1	Bullet 5 MP	1
52.	Type D QtR -T Junction	Bullet 5 MP	3
53.	Type C QtR Entry-1 & Entry-2	Bullet 5 MP	2
54.	Type D QtR -Entry	Bullet 5 MP	1
55.	Guest House Entry	Bullet 5 MP	1
56.	Guest House Exit	Bullet 5 MP	1
57.	Guest House	PTZ 4 MP	1
58.	Central Store	Bullet 5 MP	1
		Total	**103**

3. CAMPUS SURVEY

a. The bidder must conduct a detailed site survey before pre bid meeting:

- Identify coverage needs for roads, junctions, walkways, parking areas, hostels, academic blocks, administrative locations, and construction sites.
- Identify existing poles and new pole installation suitability.
- Design placement of new 6 mtr of higher poles.
- Determine ideal camera height, angles, Field of View (FoV), IR range, and mounting configuration.

b. Scalability Planning (1,000 Cameras)

The bidder must provide:

- High performance server VMS architecture.
- Scalable storage that can expand by adding enclosures/disks.
- PTMP sectors sized to accept future subscriber modules.
- PTP backbone links capable of 1 Gbps or higher throughput expansion.
- Adequate compute resources for 1,000-camera future load.

4. SUPPLY & INSTALLATION OF CAMERAS

a. 100 + New IP Cameras

To be installed across roads, open areas, hostels, pathways, perimeters, entrances, and construction zones. All cameras must be IP66/IK10 rated.

b. 4 ANPR Cameras

Installed at main gates for automated number plate recognition, integrated with VMS and vehicle database.

c. Migration of approx. 200 Existing Cameras:

All existing cameras must be:

- Reintegrated, Relocate into the new VMS
- Assigned new naming conventions
- Configured with updated retention and access rule

5. POLE INSTALLATION & FIELD INFRASTRUCTURE

The bidder shall:

- Supply & erect specialized poles with proper foundation.
- Install junction boxes with MCB, SPD, PoE power, and cable management.
- Ensure weatherproofing and proper conduit routing.

6. RF NETWORK RADIO WIRELESS LINK PLANNING & NETWORK DESIGN

a. PTMP Subscriber Modules (SM) at Camera Poles

i. Each camera cluster connected via SM.
ii. Proper alignment, SNR ≥ 20 dB or better Roof top PTMP Base Stations
iii. Installed on key buildings.
iv. GPS synchronization for interference-free operation.
v. Each base station designed to handle additional future SMs.

b. High-Capacity PTP Backhaul Network

i. PTP radios with ≥ 1.4 Gbps throughput.
ii. Provides building-to-CCR wireless backhaul.
iii. Supports future expansion by adding additional radios/channels.
iv. Each base station designed to handle additional future SMs.

c. The bidder must design:

i. PTMP clusters to connect camera groups to rooftop base stations.
ii. PTP backhaul links to connect each building to CCR.
iii. Channel plans, interference analysis, and frequency reuse strategies.
iv. RF link budgets, SNR targets, and antenna alignment plans.
v. The bidder shall carry out complete RF link planning for all wireless backhaul links connecting field CCTV nodes to aggregation/base stations

d. Planning must include:

I. Path profiling and assessment of Fresnel zone clearance
II. Line Of Sight (LOS) vs. Non-Line Of Sight (NLOS) verification using field survey tools
III. Selection of suitable frequency channels and channel widths
IV. Interference analysis and mitigation planning

V. Analysis of all other tasks for successful implementation of the project.

e. The bidder shall prepare a Wireless Deployment Plan, showing:

i. Link diagram
ii. Sector coverage plan
iii. Locations of access points and subscriber modules
iv. Antenna types and orientations
v. Pole height

f. Link planning must ensure adequate throughput for multi-camera video streams with redundancy for future expansion.

g. Supply, Installation & Mounting of Wireless Equipment

i. The bidder shall supply all RF radios, antennas, PoE injectors, surge protectors, mounts, tools, brackets, cables, and accessories required for a complete functional system.
ii. Installation includes:
- Mounting of Access Points (APs) on rooftops/poles
- Mounting of Subscriber Modules (SMs) at camera or field device locations
- Installation of antennas and alignment brackets
- Laying and dressing of CAT6 with proper conduit/pipes outdoor-rated cables from radio to PoE/Switch/Centralized control room.
- Installation of lightning arrestors and earthing/grounding as required
- All equipment must be securely mounted to withstand local weather and wind loads.
- The bidder shall ensure neat, labelled, and professional cable routing and termination.

iii. Alignment, Configuration & Optimization
All RF links shall be aligned using appropriate tools such as:
- RSSI/SNR indicators
- Real-time spectrum monitoring
- Alignment software or apps

Configuration tasks include:
- Assigning IP addresses and VLANs
- Setting channel bandwidth, frequency, TDD synchronization, and modulation settings
- Configuring QoS to prioritize CCTV video streams
- Enabling encryption and security features
- Integrating with Central Network Management System (NMS)

Optimization must ensure:
- Maximum throughput
- Integration of Wireless network with existing university LAN network/CCTV network.
- Minimum jitter and packet loss
- Stable and consistent latency suitable for real-time video applications

h. High-Capacity PTP Backhaul

- PTP radios capable of up-to 1.4 Gbps throughput connecting buildings to CCR.
- Hybrid RF–OFC Redundancy
- RF network acts as a failover link for OFC and vice versa

i. Testing, Validation & Documentation

i. After installation, the bidder shall perform end-to-end testing of each wireless link.
ii. Tests shall include:
- Link throughput test (both directions)
- Latency measurement
- Packet loss test
- Stability test for continuous streaming
- Verification of correct antenna alignment
- Verification of encryption and security settings

A detailed Testing Report shall be submitted containing:
- Link parameters (RSSI, SNR, MCS, Throughput)

- Spectrum snapshots
- Link margin calculations
- Latency and jitter reports
- Screenshots/logs of successful configuration

Documentation delivered must include:

- As-built diagrams
- Final link design and results
- Configuration backups
- RF design deliverables: RF survey report, link budget, spectrum analysis and final heat-map/coverage plan for all outdoor links and camera clusters.

j. Acceptance Criteria

The wireless backhaul system will be accepted only after fulfilling the following: All planned wireless links must achieve:

I. Stable connectivity with no packet loss > 1% during testing
II. End-to-end latency ≤ 5 ms (typical operational range)
III. Throughput sufficient for connected CCTV cameras with 20% headroom
IV. Minimum SNR ≥ 20 dB on all links
V. Minimum modulation of MCS 6 or above under normal conditions
VI. CCTV video shall stream continuously without frame drops or freezes.
VII. All equipment shall be fully integrated with VMS and the central network.
VIII. Power, grounding, and weatherproofing must comply with standards.
IX. All documentation must be verified and approved by the university.
X. A joint inspection with the University and bidder shall confirm:
XI. Correct installation quality
XII. Compliance with specifications
XIII. Completion of all deliverables
XIV. Successful implantation of the project.

7. VMS, STORAGE & CCR INTEGRATION (UP TO 1000 CAMERAS)

a. Enterprise VMS Setup

Clustered, highly available architecture supporting up to 1,000 cameras with:

- Multi-server deployment
- Video wall integration
- Role-based access
- Logging, auditing, alarms

b. Storage System

Must support:

- RAID 5/6 protection or superior
- Scalable disk expansions
- ≥ 30 days retention
- 1,000-camera future load capable

c. Integration Tasks

- Add 100+ new and 200+ existing cameras
- Separation of CCTV network from existing LAN network and integrate with single CCTV network including Wireless.
- Configure ANPR
- Integrate analytics if any
- Set event rules and retention policy

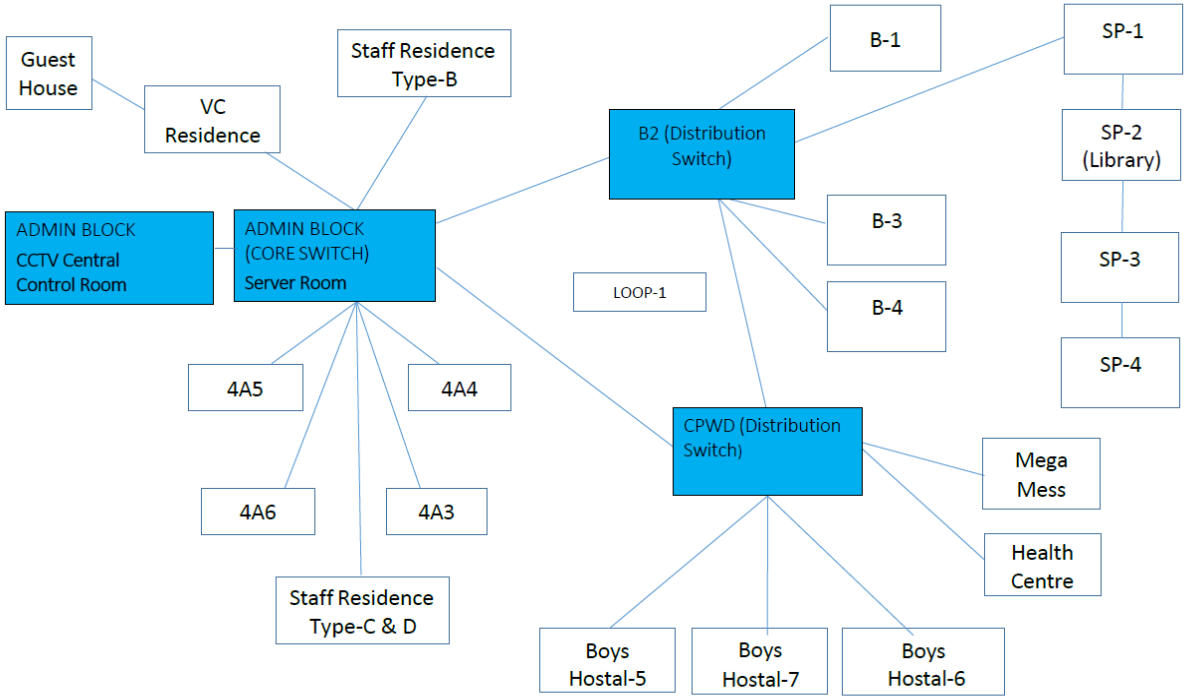
d. Existing Infrastructure

i. Network Switches Make and Model and Campus Network Diagram

Make	Model
D-Link	DGS-3120-48PC Gigabit Ethernet Switch
Digisol 24 Gigabit Ethernet port	DG-GS 1528
SiS Sunny 24 Gigabit Ethernet Switch	SiS Sunny 24 MS-G
Access Switch Type 1	Brocade ICX7250-24P

D-Link	ES1024D
NETGEAR	ProSafe GS752TPP
Brocade Distribution switch	Brocade ICX7750-48F

FIBER NETWORK LAYOUT FOR CURAJ UNIVERSITY



ii. **Camera Make and Model**

Make	Model
4MP Dome - CP Plus	CP-UNC-DA41L38-D-LQ
4MP Bullet - Hikvision	DS-2CD1043G0-1
2MP Bullet - Honeywell	HICC-2600T
2MP Dome - Honeywell	HIDC-2300V
2MP Dome - Matrix	SATATYA MIDR20FL36CWS
5MP Bullet - Matrix	SATATYA CIBR50FL40CWS
2MP Bullet - Hikvision	DS-2CD1023G0E-I

8. TESTING & COMMISSIONING

Testing includes:

- Day/night camera clarity
- PTMP link quality, latency, SNR
- PTP throughput and failover testing
- VMS recording/playback
- ANPR recognition accuracy
- Power/earthing tests
- Full CCR monitoring validation

All results must be formally documented.

9. DOCUMENTATION & TRAINING

The bidder shall provide:

- As-built drawings
- RF link diagrams
- VMS and storage topology
- Configuration backups

- Bidder shall hand over all original software licenses, admin credentials, activation keys, warranty certificates, compliance certificates, manuals and any other related documents for the supplied hardware, software and systems to the purchaser at the time of installation/commissioning.
  - Bidder must hand over all licenses, warranty certificates, WPC/BIS/ISO certificates, as-built drawings, RF plans, at final acceptance.
- User manuals for installed equipment
- User manuals
- Trainings for security staff & IT staff

10. WARRANTY & SUPPORT

- 3-year onsite comprehensive warranty and maintenance with adequate skilled resident engineer.
- Ensure all hardware/software must be with Next Business Day warranty with 24x7x365 support and maintenance. The warranty should reflect in the support web site of the OEM.
- VMS software support and warranty should reflect in the support web site of the OEM.
- Quarterly preventive maintenance includes visits, cleaning and inspection of cameras/poles, RF alignment check, firmware update plan etc.

Additional Terms & Conditions (ATC)

1. The bidder shall mandatorily conduct a comprehensive site survey of the Central University of Rajasthan campus, at their own cost, prior to the pre-bid meeting to assess the feasibility of implementing the wireless CCTV surveillance system. All queries, including those related to the technical specifications, arising from this survey shall be raised and clarified only during the pre-bid meeting; no queries regarding this tender will be entertained thereafter.
2. Bidder should be responsible for the timely Supply of the Material as per specified specifications and accepted in bid.
3. Bidder should be responsible for End to End testing for entire work as specified in bid documents.
4. The bidder shall complete the implementation of the VMS-based wireless security and surveillance CCTV system with centralized monitoring within the stipulated timeframe. The bidder shall effectively utilize the existing infrastructure, including Honeywell, Hikvision, Matrix, CP Plus, and other OEM IP cameras, as well as the current network connectivity, to ensure a fully integrated solution.
5. The bidder shall configure, commission, and thoroughly test the complete VMS-based wireless security and surveillance CCTV setup to ensure its readiness for Go-Live. The bidder shall ensure that the entire system operates in accordance with the University's requirements, demonstrating full functionality and reliability before formal acceptance.
6. Centralized monitoring for a VMS-based wireless security and surveillance CCTV setup with existing IP cameras is indeed available and commonly implemented. Such systems allow integration of multiple cameras both wired and wireless into a single Video Management Software (VMS) interface or setup, enabling centralized viewing, control, and management on a single-window screen. This facilitates monitoring all cameras and network devices from one platform, regardless of camera locations or underlying connectivity methods, including wireless.
7. The bidder shall provide a comprehensive onsite warranty and support for a period of three (3) years for all types of IP cameras, network switch racks, and passive network connectivity components used in the existing network, along with all materials supplied and proposed solutions under this bid. This warranty shall cover maintenance, repair, and replacement services to ensure the proper functioning of the equipment throughout the warranty period.
8. The bidder shall be responsible for maintaining the implemented VMS-based IP CCTV Surveillance System in its original configuration and shall make every effort to ensure its proper functioning during the specified maintenance period. Replacement of any item or spare part shall be carried out only after obtaining prior written approval from the University.

9. Bidder should be responsible for Preventive Maintenance of implemented VMS based IP Wireless Security and Surveillance CCTV Setup quarterly basis other than corrective calls. Corrective Maintenance call will be attended within 24 working hours after reporting and will be resolved within 48 working hours including hardware/software failure related issues.
10. The bidder shall be responsible for responding to the University's requests for technical support and services within the timelines specified in the bid. The bidder shall also submit all required supporting documents, including call reports, service reports, and other relevant records for each support activity, as evidence of timely and effective service.
11. The supplier shall be responsible for providing hands-on training to all ICT technical staff and security section staff on the operation, management, maintenance, and troubleshooting of the live surveillance setup. The training shall be comprehensive enough to enable the staff to independently manage and maintain the system effectively a period of one week at the supplier's cost.
12. The bidder shall configure the network for the VMS-based CCTV setup in accordance with the University's requirements, ensuring that specific authorized users can securely access and view designated IP camera(s) on their mobile devices (iOS/Android) over the Internet. The configuration shall include necessary network settings, firewall rules, and mobile application setup to facilitate seamless remote access while maintaining system security.
13. Bidder should be responsible for any other work related to integration, up-gradation, and replacement of camera and connectivity currently used in existing Wireless Security and Surveillance CCTV Setup installed at university to make CCTV surveillance system functional in single window screen.
14. The bidder shall integrate approximately 180 existing CCTV cameras into the VMS platform as part of the proposed surveillance system. Additionally, the bidder shall perform comprehensive network diagnostics, including Penta scan and OTDR testing of the entire existing network infrastructure at Central University of Rajasthan, to ensure seamless integration and proper functioning of all existing CCTV cameras within the network.
15. The CCTV solution shall be capable and scalable to integrate up to 1000 cameras, including both new and existing units. The storage system must support continuous recording for a minimum of 300 cameras initially, with server and storage infrastructure designed to be scalable to accommodate recording and storage for up to 1000 cameras on an as-required basis.
16. The VMS software shall be supplied with a minimum of 300 camera licenses on a perpetual, lifetime basis. The software license must support expansion up to 1000 cameras without any limitation. Upgradation, updates, and patches to the VMS software shall be provided at no additional cost during the entire warranty and maintenance period.
17. The VMS server appliance shall be equipped with a high-end processor and sufficient hardware resources to support the full load of up to 1000 cameras. The solution must be capable of handling 1000 camera connections without requiring any additional or separate server hardware for this capacity.
18. Any item or product required for the successful implementation and full functionality of the complete Wireless CCTV Surveillance System, but which is not explicitly included in this tender, shall be deemed to be within the scope of the bidder. The bidder shall supply and install such items at no extra cost to the University.
19. During the implementation and maintenance periods of the CCTV project, the bidder shall be solely responsible for providing all items and services required for the project's completion and operation. No machinery or equipment outside the scope of the bid shall be provided by the University, and the bidder shall bear all associated costs.
20. All civil and electrical work required for the successful installation and operation of the Wireless CCTV Surveillance System shall be the sole responsibility of the bidder. The bidder shall also bear the cost and supply of any materials, parts, or components necessary for such civil and electrical work as part of the project scope.
21. The bidder shall provide onsite maintenance support for a period of three (3) years at Central University of Rajasthan. The bidder shall depute one highly skilled and trained manpower resource (resident engineer), to managing and maintaining the complete CCTV surveillance system. The deputed personnel

must be fully capable of handling all aspects of operation, maintenance, and troubleshooting related to the implemented system.

22. Payment for the deployment of resident engineer shall be made on quarterly basis after satisfactory services for the respective period and no advance payment shall be made. The payment will be made on submission of bills and proof of payment of wages. The payment shall be released within 30 days from the date of submission of complete and correct bills. The rate quoted by the bidder shall be inclusive of all statutory obligations and no escalation shall be admissible during the 03 years contract period.
23. The bidder shall ensure proper tagging and labelling of all CCTV surveillance system equipment, including but not limited to cameras, RF wireless base station radios, RF wireless base station sector antennas, backhaul antenna, wireless CPE radios with integrated antennas, pole mount outdoor junction boxes, poles, UPS units, and any other related hardware. The tagging and labelling shall be clear, durable, and facilitate easy identification and maintenance.
24. The bidder shall ensure the physical safety and security of all CCTV cameras, wireless radios, and related surveillance equipments to protect them from damage, tampering, or unauthorized access. The bidder shall take all necessary measures, including proper mounting, enclosures, and protective arrangements, to safeguard the equipment throughout the project duration.
25. The CCTV surveillance solution shall operate continuously, ensuring that all cameras remain live and fully functional 24 hours a day, 7 days a week, 365 days a year without fail throughout the entire maintenance period. The bidder shall be responsible for promptly addressing any system faults to maintain this uninterrupted operational availability.
26. Electricity power for the CCTV surveillance system may be drawn from the nearest available source within the University premises. However, the supply, installation, and maintenance of all power cables, switches, MCBs, circuits, UPS units, and any other related power backup equipment shall be the sole responsibility of the bidder.
27. The bidder shall ensure that route markers are provided and clearly placed for all electrical cables laid specifically for the CCTV surveillance system. This marking shall facilitate easy identification, maintenance, and troubleshooting of the cables throughout the system's lifecycle.
28. Release of payment to the bidder shall be subject to satisfactory inspection and verification by the university.
29. The bidder shall provide detailed documentation of all equipment proposed in the bid, including model numbers, datasheets and STQC (Standardization Testing and Quality Certification) certificate numbers wherever applicable. These documents shall be submitted along with the technical bid for evaluation.
30. The MAC address of the camera, antenna, server, storage, workstation, switches, other equipment shall be registered in the name of the same OEM.
31. The IP cameras supplied shall be plug-and-play and must support auto-discovery functionality within the Video Management Software (VMS), enabling seamless and efficient integration without manual configuration.
32. The bidder shall provide the University with comprehensive documentation upon successful implementation of project, including the CCTV surveillance project implementation plan, detailed layout drawings, camera placement plans, network connectivity diagrams, and any other relevant design and configuration documents.
33. The bidder shall be responsible for providing comprehensive onsite support for a period of three (3) years for the entire CCTV surveillance system implemented at Central University of Rajasthan (CURAJ). This support shall include maintenance, troubleshooting, repairs, and any necessary technical assistance to ensure continuous system functionality.
34. All other accessories, network equipment, switches, cables, connectors, SFP modules, and any other items required for the successful integration and implementation of the CCTV surveillance system shall be the sole responsibility of the bidder. No separate payment shall be made by the University for such items beyond the quoted bid.
35. The original equipment manufacturer (OEM) of the proposed cameras must be a member of the current ONVIF (Open Network Video Interface Forum) committee. Proof of valid membership shall be provided as part of the technical bid submission.

36. The original equipment manufacturers (OEMs) of major items such as CCTV cameras of all types, VMS software, servers, storage devices, switches, and other key components, including their sister concerns, group companies, or subsidiaries, shall not have been blacklisted or debarred in the last ten years by any Ministry under the Government of India, any State Government, or any Public Sector Undertaking (PSU). The bidder shall provide a declaration to this effect as part of the technical bid submission.
37. The OEM of the CCTV cameras and other major equipment should have an established support center located in India to ensure timely and effective after-sales service and technical support.
38. The OEM, bidder, and system integrator (SI) responsible for the CCTV system implementation shall provide a dedicated toll-free helpline number for technical support. Additionally, they shall submit a detailed escalation matrix to the University, outlining the levels of support personnel and contact details for resolving issues promptly.
39. The bidder shall be responsible for managing the wireless CCTV surveillance system as per the scope of work and tender document during the on-site comprehensive maintenance period of 3 years. No other cost or manpower will be provided by the University for the same.
40. Integration with existing campus LAN/wireless and creation of dedicated CCTV network wired and wireless. Integration of all existing CCTV cameras in VMS. All new and existing cameras must be display in single window.
41. The Bidder shall ensure provision of proper Earthing for all required equipment as part of the installation and commissioning work. This includes, but is not limited to, RF devices, networking equipment, communication interfaces, control panels, and any other associated hardware. All earthing works shall comply with relevant industry standards, safety regulations, and manufacturer recommendations to guarantee system reliability, personnel safety, and protection against electrical faults.
42. Bidder/Supplier shall provide all hardware, licenses, software, accessories, consumables, and cabling necessary for the proper and complete functioning of the system, even if any such items are not explicitly mentioned in the BoQ or Annexures.
43. Offered items must comply with the listed standards/certifications (ISO 27001, RoHS, CE, FCC, BIS/others as applicable) and that makes/OEMs must be as per approved list or equivalent.
44. Bidders shall submit OEM datasheets, compliance statements (Annexure-wise), and OEM authorization letters for each quoted item, confirming that quoted model meets or exceeds the minimum specifications.
45. All wireless radios, antennas and related RF equipment shall be WPC/DoT approved for use in India, with EIRP limits as per current regulations, and OEM certificates to be submitted.
46. Bidder shall provide all software required for the complete integration, configuration, and implementation of the CCTV surveillance system.
47. Bidder shall configure and integrate all required servers for the CCTV network, including NTP and any other necessary services, for proper time synchronization and system operation. Bidder shall also integrate all supplied RF radios with the University's existing Network Management System (NMS) for centralized monitoring and management.
48. All cameras, RF radios, switches and servers shall support HTTPS, SSH, SNMPv3, secure NTP, strong password policy and role-based access control. Default passwords shall be changed at the time of commissioning and also share with the university.
49. All components (cameras, RF, VMS, storage, switches), including: signed firmware, regular security patches from OEM, ability to disable unused services/ports, syslog/SIEM export.
50. All IP cameras and VMS shall be ONVIF compliant (at least Profiles S and T), with full support for live view, recording, PTZ, events and configuration from the VMS.
51. All PTZ presets, ANPR events and analytics alarms must be fully operable from the central VMS.
52. After successful installation and commissioning of the CCTV surveillance system, the bidder shall, at their own cost, arrange a comprehensive cyber security audit of the complete solution (including cameras, RF radios, servers, storage, VMS and network components) through a qualified security auditor, implement all critical and high-severity recommendations within the agreed timelines, and submit the final cyber security audit report and compliance certificate to the University.
53. Before carrying out any excavation or trenching work inside the University campus, the bidder shall obtain prior written permission and route approval from the University. The bidder shall provide and

maintain proper route markers along the entire power cable route, including all bends, junctions and terminations. Any damage to existing utilities, services, roads, footpaths, landscaping or structures during excavation/trenching shall be entirely at the bidder's risk, and all restoration, repairs and associated costs shall be borne by the bidder.

54. Installation and commissioning of the CCTV surveillance system shall be treated as a turnkey project. After successful commissioning and final acceptance, the bidder shall be responsible for comprehensive on-site operation and maintenance of the complete system (including cameras, RF radios, poles, junction boxes, switches, servers, storage, VMS, licenses, cabling, and associated software etc.) for a period of three (3) years at no additional cost to the University. This comprehensive maintenance shall include all required manpower, including deployment of qualified sufficient resident engineer(s), and all spares, repairs and replacements during the maintenance period.
55. The bidder shall maintain minimum 99% uptime (monthly) for the overall CCTV surveillance system, including cameras, RF radios, switches, servers, storage, VMS and associated network components. Uptime shall be calculated excluding approved planned maintenance windows notified at least 48 hours in advance. Bidder shall ensure to keep additional/spare items during the maintenance period of 3 years.
56. Service Level Agreement (SLA)

i. Pre-implementation SLAs:

If the Successful bidder fails to complete the execution of works or any section by the time for completion, within the relevant time prescribed, then the Successful bidder shall pay liquidated damages to CURAJ at the rate of the 0.5 % of contract value for per week of delay or part thereof subject to maximum of 10% of the contract value. CURAJ may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Successful bidder. The payment or deduction of such damages shall not relieve the Successful bidder from his obligation to complete the Works, or from any other of his obligations and liabilities under the contract.

ii. Post-implementation SLAs
   a. In the event of failure of any of the sub-systems or components of the proposed solution, the bidder must ensure that defects are rectified within 24 hours, or the equipment is replaced with necessary configuration free of cost within 48 hours from the time it was reported.
   b. The bidder must maintain a suitable stock of necessary spare equipment during the contract period.
   c. Collecting of faulty hardware from the site and provisioning the replacement hardware during the contract period (warranty) on the site shall be the responsibility of the bidder.

iii. CURAJ reserves the right to invoke the Performance Bank Guarantee submitted by bidder in case: -
   a. Supplied equipment, hardware & software components fail to achieve the performance as stipulated in this document.
   b. The bidder fails to provide satisfactory service in the scheduled time frame, during the contract period, as stipulated in this document.

iv. Bidder must response within 02 hours after the lodge of Complaint.
   a. Priority 1 (critical) faults: complete outage of CCR/VMS, storage, server, RF backbone/network or more than 20% cameras down – response within 2 hours, resolution within 8 working hours.
   b. Priority 2 (major) faults: failure affecting 5–20% cameras or important locations – response within 4 hours, resolution within 24 working hours.
   c. Priority 3 (minor) faults: single camera or non-critical issue – response within 1 working day, resolution within 24 hours.

v. Penalties can impose for delay in Fault resolution (inclusive of working, non-working days and holidays) as mentioned below:

Sl. No	Fault Resolution-SLA	Time allocated	Penalty (in % Percentage)

01	Call Resolution (in Case of non-hardware failure)	< 24 hrs.	0%
		>24 hrs. <48 hrs.	0.5% of the unit hardware/software cost
		>48 hrs. <72 hrs.	1% of the unit hardware/software cost
		>3 Days < 5 Days	2% of the unit hardware/software cost
		>5 Days < 7 Days	5% of the unit hardware/software cost
		>7 Days	10% of the unit hardware/software cost
02	Hardware repair/replacement	RMA= T	After the delivery of replacement of faulty product by OEM
		< T+48 hrs.	0%
		>T+48 hrs < T+72 hrs.	1% of the unit hardware/software cost
		> T+3 Days <T+ 5 Days	2% of the unit hardware/software cost
		>T+5 Days <T+7 Days	5% of the unit hardware/software cost
		> 7 Days	10 % of the unit hardware/software cost

The maximum penalty shall not be more than 10% of the Contract value during the entire contract period.

- Penalties shall not be levied on the successful bidder in case of a Force Majeure event affecting the SLA which is beyond the control of the successful bidder.
- Penalty shall be imposed at the Rate Rs. 2000/- per day for non-availability of manpower/resident engineer.
- In case of any violation of tender terms, conditions, specifications, or contract obligation by the successful bidder/supplier, the university reserves the rights to :
    - Forfeit the Performance Bank Guarantee (PBG) in full
    - Blacklist/debarred the vendor in participating in future tenders.
    - Terminate the contact and university reserves the rights to take appropriate action.

57. Downtime: During warranty period not more than 5% downtime will be permissible. For downtime exceeding penalty equivalent to 0.50% of the F.O.R. value of the equipment (Hardware/Software) for every week or part thereof may be imposed. Downtime will be counted from the date and time of the filing of complaints within the business hours of the tenderer.
58. The University reserves the right, at its sole discretion, to extend the comprehensive maintenance / operation and maintenance (O&M) period beyond the initial three (3) years on the same terms and conditions, or on mutually agreed terms, and the bidder shall be bound to provide such extended maintenance services if so required by the University.
59. The Central University of Rajasthan (CURAJ) reserves the right to conduct a Proof of Concept (PoC) demonstration of the proposed solution during the technical evaluation stage, if deemed necessary. The bidder shall agree to present and live-demonstrate the PoC as an integral part of the technical evaluation process for the quoted make and model, including verification of compatibility with the existing network infrastructure and IT systems of CURAJ. The schedule for the PoC demonstration shall be communicated to the prospective bidders at a later stage, if the PoC is to be conducted, and all costs associated with the PoC shall be borne by the bidder. The POC can be conducted at any stage of tender with prior notice to the bidder.
60. The bidder shall ensure The cost of all electrical items such as including sockets, switches, cables, connectors, glands, lugs, MCBs, junction boxes, enclosures, termination kits, and any other required accessories as well as all works necessary to carry power from the source to the destination, including the provision and integration of UPS connections and laying of all required cables up to each CCTV connection point, shall be entirely within the scope of the bidder/supplier. The University will provide only the raw power tap point, and the bidder shall be responsible for all remaining work required making the entire CCTV system fully functional. Any faults arising during execution and any repair work required to rectify such faults shall also fall under the scope of the bidder.

61. The bidder shall ensure that during the integration phase of existing CCTV network with the VMS, the data network and CCTV network remains fully operation without any disruption, interruption, or degradation in performance. Smooth streaming of CCTV traffic from all Cameras to the control room must be maintain at all time, with no slowness, latency, or packet loss experience by end user. The bidder shall provision of sufficient network throughput and bandwidth to support concurrent video feeds, any integration activities including firmware updates, IP configuration etc. shall be schedule during non-peak hours with prior notice to the ICT CELL.
62. The bidder shall be responsible for designing a comprehensive CCTV network topology based on the proposed camera locations across the university campus. The design shall ensure optimal positioning of cameras for maximum field coverage and minimal blind spots.
63. The quantity of cameras and associated equipment mentioned in the tender documents is indicative. The University reserves the right to increase or decrease the quantities at the time of execution of work depending upon actual site conditions and security requirements.
64. The bidder shall carry out RF network planning, throughput calculation, and capacity assessment considering current requirements and future scalability. This planning activity must be completed to ensure that the proposed equipment and design are technically adequate for the University's requirements.
65. The bidder shall design, configure, and demonstrate a hybrid RF/OFC failover mechanism to ensure uninterrupted video streaming during network outages or any kind of link-level interruption.
66. The bidder shall implement a Structured CCTV Integration Plan to ensure a seamless transition and minimal downtime during commissioning or existing camera integration phases.
67. The bidder shall agree to provide extended warranty and maintenance services beyond three (3) years as per the quoted rates in financial bid and negotiations by the university.
68. Should you have any queries/ doubts, need to raise it only in pre-bid meeting. Any other mode of Communication in this regards, is not acceptable.
69. The bidder shall not assign or sublet his contract or any part thereof to any other Agency.
70. Bidder should have experience of at least 5 years in the field of Wireless Outdoor CCTV Surveillance System/similar work and at least 10 years in the field of Information Technology business/wired and wireless LAN, MAN, WAN/ CCTV. Joint ventures or consortium are not permitted. Bidder should provide relevant information in technical bid.

5. OTHER TERMS AND CONDITIONS OF THE TENDER

1. The tenderer shall certify that the rates being quoted are not higher than those quoted for any Govt. Deptt. or Institution or any organization during last one year. If during the last one year at any time the tenderer has quoted rates lower than those quoted against this tender, the University would be given the benefit of Lower rates by the tenderer. The relevant documents should be enclosed with technical bid.
2. The duly constituted committee appointed by the competent authority of Central University of Rajasthan, Bandarsindri, reserves the right to select some items (in single or multiple units) and reject the others or all items mentioned in the Schedule. The same committee will also reserve the right to revise or alter the specifications before acceptance of any tender with prior notice on the University website and Central Public Procurement Portal (CPPP).
3. Incomplete bid, amendments and additions to bid after opening are liable to be ignored and rejected.
4. The Bid shall be treated as a 2 Bid System. The Technical Bid will be considered for evaluation of those bidders who's Tender Fee, (if applicable) and Earnest Money Deposit (EMD) is found in order. Financial Bid shall be opened for those bidders who have qualified in Technical Evaluation.
5. Changes/Amendment: At any time prior to the deadline for submission of tender, the University may amend the tender documents issuing addendum/corrigendum. The University shall have the right at any time, by written notice, in the form of an amendment order, to make any changes, if deems necessary, including, but not limited to, changes in specifications, design, delivery, testing methods, packing or destination. If any such required changes cause an increase or decrease in the cost of or the time required for performance, an equitable adjustment shall be made in the contract price or delivery schedule, or both. Any claim by the Vendor for adjustment under this clause shall be deemed waived unless asserted in writing within ten (10) days receipt from the Vendor. Notice of change (amendment order). Price increase, extension of time for delivery and change in quantity shall not be binding on the University unless sufficiently justified by vendor and accepted by the university in a form of amendment/ modified Order issued and signed by the University.
6. Bid Validity- Bids should be valid for a period of 180 days from the date of opening of Technical bid.
7. Withdrawal of bids: No bidder will be allowed to withdraw its bid in the interval between the deadline of submission of bids and expiration of period of bid validity. Withdrawal of bid during this period will result in forfeiture of the bidder's bid security (EMD) and other sanctions.
8. OEM/Channel Partner/Authorized Dealer/agents of Supplier: when a firm sends quotation for an item manufactured by some different company, the firm is also required to attach, (in its bid,) the manufacturer's authorization certificate and also manufacturer's confirmation of extending the required warranty for that product. In cases where the manufacturer has itself submitted the bid, the bids of its authorized dealer will not be considered and EMD will be returned.
9. Agency Commission: The amount of Agency Commission, in case of manufacturer/supplier is from the foreign country (normally not exceeding five percent) payable to the Indian Agent should not be more than what is specified in the Agency agreement (a certified copy should be submitted along with the bid) between the bidder and the Indian Agent. The Indian Agent will be required to submit a certificate along with their Agency Commission bill, confirming that the amount claimed as Agency Commission in the bill has been spent/will be spent, strictly to render services to the foreign Principal, in terms of the Agency Agreement. The Purchaser or their authorized agencies and/or any other authority of the Government of India shall have rights to examine the books of the Indian Agent and defects or misrepresentations in respect of the afore indicated confirmation coming to light during such examinations will make the foreign Principal (i.e. the Contractor) and their Indian Agent liable to be banned/ suspended from having business dealings with the Purchaser, following laid down procedures for such banning/suspension of business dealings.
10. Conflict of Interest among Bidders/Agent: The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
    a. they have controlling partner (s) in common; or
    b. they receive or have received any direct or indirect subsidy/financial stake from any of them; or
    c. they have the same legal representative/agent for purposes of this bid; or

d. they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder; or

e. Bidders are not allowed to participate in more than one bid in this bidding process. Participation by a bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/sub-assembly/assemblies from one bidding manufacturer in more than one bid.

f. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:

   I. The principal manufacturer directly or through one Indian agent on his behalf; and

   II. Indian/foreign agent on behalf of only one principal.

g. a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;

h. in case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/common business/ management units in same/similar line of business.

11. Bid Security (EMD): Bid Security should remain valid for a period of 45 (Forty Five) days beyond the final bid validity period. The Bid Security can be submitted in the form of an Account Payee Demand Draft/Fixed deposit receipt/Banker's Cheque Bank Guarantee from any of the Commercial Banks/payment online in an acceptable form in favor of "Registrar, Central University of Rajasthan" payable at Kishangarh/ Bandarsindri. The MSEs are provided tender documents free of cost and are exempted from payment of earnest money subject to furnishing of relevant valid certificate for claiming exemption. ***Only Manufacturer for goods and Service Provider for services are eligible for exemption from EMD, traders are excluded from this exemption***. A bidder's Bid Security will be forfeited if the bidder withdraws or amends its/his tender or impairs or derogates from the tender in any respect within the period of validity of the tender or if the successful bidder fails to furnish the required Performance Security within the specified period. Bid securities of the unsuccessful bidders will be returned to them at the earliest after expiry of the final bid validity period and latest by the 30th day after the award of the contract. Bid Security will be refunded to the successful bidder on receipt of a performance security.

12. MSE Bidders:, if Micro and Small Enterprises (MSE) participating in tender & quoting price within price band of L1+15 (fifteen) per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 20 (twenty) per cent of total tendered value. The 20 (twenty) per cent quantity is to be distributed proportionately among these bidders, in case there are more than one MSMEs within such price band. Within this 25% (Twenty Percent) quantity, a purchase preference of four per cent (that is, 25 (twenty) per cent out of 25 (twenty) per cent) is reserved for MSEs owned by Scheduled Caste (SC)/Scheduled Tribe (ST) entrepreneurs (if they participate in the tender process and match the L1 price). Provided that, in event of failure of such SC/ST MSE to participate in tender process or meet tender requirements and L1 price, four per cent sub-target shall be met from other MSE. MSEs would be treated as owned by SC/ ST entrepreneurs:

a) In case of proprietary MSE, proprietor(s) shall be SC /ST

b) In case of partnership MSE, the SC/ST partners shall be holding at least 51% (fifty-one percent) shares in the unit

c) In case of Private Limited Companies, at least 51% (fifty-one percent) share shall be held by SC/ST promoters.

13. Public Procurement (Preference to Make in India), Order 2017

As per Public Procurement (Preference to Make in India), revised Order 2017 the 'Class-I local supplier' will get preference over non local suppliers', as defined under the Order,

I. Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under this Order.

II. Local content' means the amount of value added in India which shall, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

III. Purchase Preference: Purchase preference shall be given to 'Class-I local supplier' in procurements in the manner specified here under.

a) If L1 bidder is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1 bidder. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly.

b) In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

c) In the procurements of goods or works, which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

I. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.

II. If L1 bidder is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.

III. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price; the contract may be awarded to the L1bidder.

d) "Class-II local supplier" will not get purchase preference in any procurement undertaken by procuring entities.

e) Margin of Purchase Preference: The margin of purchase preference shall be 20%.

f) Exemption of small purchases: procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order.

g) Verification of local content:

a) The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.

b) In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

c) False declarations will be in breach of the Code of Integrity under Rule 175 (1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

d) A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment.

14. Restrictions for bidders from countries sharing land border in India

i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

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

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

a. An entity incorporated, established or registered in such a country; or

b. A subsidiary of an entity incorporated, established or registered in such a country; or

c. An entity substantially controlled through entities incorporated, established or registered in such a country: or

d. An entity whose *beneficial/ owner* is situated in such a country; or

e. An Indian (or other) agent of such an entity; or

f. A natural person who is a citizen of such a country; or

g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

iv. The *beneficial owner* for the purpose of (iii) above will be as under:

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

Explanation—

a) "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
b) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

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

Model Certificate for Tenders

"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.]"*

15. Performance Security: On receipt of notification of award from the University, the successful Bidder within 14 days shall furnish the performance security at 5% of the cost of the material ordered in the form of Account Payee Demand Draft/Fixed deposit receipt/Banker's Cheque/ Bank Guarantee from a Commercial Bank, in favor of "Registrar, Central University of Rajasthan". Performance security should remain valid for a period of 60 days beyond the date of completion of all contractual obligation of the supplier, including warranty obligations. The Performance Security will be forfeited and credited to the University account in the event of a breach of contract by the contractor. It will be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60(sixty) days of completion of all such obligations including the warranty under the contract. Failure of the successful bidder to submit the performance security shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the University may make the award to the next lowest evaluated bidder on same rate or call for new bids.

16. Prices and Taxes: Prices quoted should be firm and shall remain firm until required deliveries have been completed unless otherwise expressly agreed to, in writing by both parties. The vendor agrees that any price reduction made with respect to Material covered by this order subsequent to placement will be applied to the order.

I. Elements of Price: Where the price has several components such as the price of the goods, cost of installation and commissioning, operators' training, and so on, bidders should furnish a cost break-up indicating the applicable prices and taxes for each of such components along with the overall price.

II. Currency: Domestic tenderers are to quote and accept their payment in Indian currency; Indian agents of foreign suppliers are to receive their agency commission in Indian currency; costs of imported goods, which are directly imported against the contract, may be quoted in foreign currency (currencies) and will be paid accordingly in that currency; and the portion of the allied work and services, which are to be undertaken in India (like installation and commissioning of equipment are to be quoted and paid in Indian currency.

Prices should be FOR –Central University of Rajasthan and for imported equipment supplier will be responsible for custom clearance and forwarding the same up to university campus. Custom Duty will be reimbursed on actual basis, after submission of the evidence in original. All prices specified herein include all charges for, but not limited to, inspection, and packaging. Prices set forth shall be inclusive of applicable taxes until and unless specified in the schedule. University is having GST Notification no. 45/2017-Central Tax (Rate) dated 14-11-2017 & Notification No. 47/2017-Integrated Tax (Rate) dated 14-11-2017 for availing concision. This University is also registered with DSIR vide TU/V/RG-CDE(1115)/2018 dated 12-10-2018 for availing concessional Custom Duty. However, rate should be quoted as per latest applicability of above notifications/certificates.

17. Price Fall Clause:- If at any time prior to delivery of the stores, the bidder/supplier reduces the sale price of such equipment stores as covered under this tender enquiry, to any organization (including Central/State/Deemed university) at price lower than the price quoted under this contract, he shall forthwith reduce the price payable under this tender for the equipment stores being supplied after the date of coming into force of such reduction, the price of equipment stores shall stand corresponding reduced.

18. Terms of Payment:

a. Terms of payments for Domestic Goods: 50% of the total payment shall be released on submission of proof of delivery of complete equipment stores (stores/consignee receipt), inspection report and on certification of satisfactory installation of the equipment at the consignee's premises and after "ensuring verification of the Performance Security". 20% of the total payment shall be released upon successful installation, commissioning, testing and balance 30% upon after test run of the equipment at least for a month and after ensuring that already furnished Performance Security is valid for a period of 60 days beyond the date of completion of all contractual obligations of the bidder / supplier including comprehensive maintenance warranty obligations.

b. Documents for Payments of Domestic Goods:

i. Supplier's Invoice indicating, inter alia description and specification of the goods, quantity, unit price, total value;
ii. Packing list;
iii. Insurance certificate, if applicable;
iv. Railway receipt/consignment note;
v. Manufacturer's guarantee/warranty certificate;
vi. Inspection and installation certificate duly signed by the service engineer and university official; and
vii. Any other document(s) as and if required in terms of the contract.
viii. Copy of cancelled cheque/NEFT detail for making online payment.

c. Terms of payments for Imported Goods:

I. An irrevocable letter of credit (L/C) for 100% of the value of the imported equipment stores (excluding the value of the Indigenous / Indian equipment) stores, if any shall be established on submission of the acknowledgement of the order by the successful bidder stating the country of origin and port of shipment, submission of Performance Security @ 5% of the Purchase Order value, four copies of the Performa invoice and confirmed Letter of Credit (LC) opening details.

It shall be the responsibility of the bidder to ensure that all the requisite documents are provided to the purchaser including the Performance Security in original for appropriate denomination and period on priority basis, so as to ensure opening of LC on time.

Out of this, 80% of the value of the imported equipment /stores will be paid against inspection certificate (where applicable) and shipping documents to the Principal through L/C. Balance 20% will be released within 30 days after due certification by the Purchaser/Institute for successful commissioning of the equipment at the premises and also, after ensuring that the furnished Performance Security is valid for a period of 60 days beyond the date of completion of all contractual obligations of the bidder/supplier including comprehensive warranty obligations.

OR

II. 100% via wire transfer or foreign DD after successful commissioning of the equipment at the premises and also, after ensuring that the furnished Performance Security is valid for a period of 60 days beyond the date of completion of all contractual obligations of the bidder/supplier including comprehensive maintenance warranty obligations.

d. Documents for Payments of Imported Goods: Documents, which the supplier is to furnish while claiming payment, are specified in the Letter of Credit, but usually are:

i. Supplier's original invoice giving full details of the goods including quantity, value, and so on;
ii. Packing list;
iii. Certificate of country of origin of the goods to be given by the seller or a recognized chamber of commerce or another agency designated by the local Government for this purpose;
iv. Manufacturer's test certificate and guarantee;
v. Certificate of insurance;
vi. Bill of lading/airway bill/rail receipt or any other dispatch document, issued by a Government agency (like the Department of Posts) or an agency duly authorized by the concerned Ministry/Department, indicating:

a) Name of the vessel/carrier;

b) Bill of lading/airway bill;

c) Port of loading;

d) Date of shipment;

e) Port of discharge and expected date of arrival of goods; and any other document(s) as and if required in terms of the contract.

19. Insurance: Wherever necessary, the goods supplied under the contract, shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the contract. If considered necessary, insurance may cover "all risks" including war risks and strike clauses. The amount to be covered under insurance should be sufficient to take care of the overall expenditure to be incurred by the Procuring Entity for receiving the goods at the destination. Where delivery of imported goods is required by the purchaser on CIF/CIP basis, the supplier shall arrange and pay for marine/air insurance, making the purchaser beneficiary. Where delivery is on FOB/FAS basis, marine/air insurance shall be the responsibility of the purchaser.

20. E-Payments: Bidders are required to enclose photocopy of cheque & NEFT Bank Details with tender /quotation to enable purchaser to making payment through on line transfer.

21. Deduction of Income Tax, Service Tax and so on, at source from payment to suppliers: This will be done as per existing law in force during the currency of the contract.

22. Refund from Supplier: If the supplier, after claiming and receiving reimbursements for GST, excise duty, custom duty, and so on, from the purchaser, applies to the concerned authorities for refunds, on genuine grounds, of certain portions of such duties and taxes paid by it and receives the allowable refunds. Such refunds contain the purchaser's share also (out of the payments already made by the purchaser to that supplier) should be refunded to the University.

23. Delivery Period: The equipment should the delivered to Central University of Rajasthan and within a time period of 6 months from the date of LC opening and complete installation within 30 days after date of arrival. If, some accessories/items are quoted on indigenous based in case of imported equipment, the supplier are allowed to supply all the items within validity period of supply of imported equipment. In case of indigenous purchase, supply should be made within 45 days & installation be completed within next 30 days. If any material is not delivered by the date specified therein, the University reserves the right, without liability, to cancel the order for undelivered material not yet shipped or tendered, and to purchase the same from another vendor and to charge the defaulting Vendor for any loss incurred in this transaction. Any provisions thereof for delivery by installment shall not be construed as obligatory unless agreed upon by both the parties. The University shall have the right to refuse deliveries made more than one week in advance of
any delivery schedule appearing in the order unless arrangements for such early delivery have been confirmed with the receiving party.
If the vendor is unable to complete performance at the time specified for delivery, by reason of strikes, labour disputes, riot, war, fire or other causes beyond the Vendor's reasonable control, the university at its option, may elect to take delivery of material and to pay such proportion of the contract price as deemed reasonable by the university.

24. Rescheduling: The University may without liability at least seven days prior to the scheduled delivery date appearing on the order, defer delivery on any or every item under said order by giving oral notice to the Vendor (confirmed in writing within seven working days) of any necessary rescheduling.

25. Shipping, Packaging and Labeling: All Material purchased hereunder must be packed and packaged to ensure its safe delivery in accordance with good commercial practices and where incorporated, the University's packaging specification. The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit, including the final destination. The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in the contract and in any subsequent instructions ordered by the Purchaser. It is the sole responsibility of the vendor to provide/replace the item/goods, if it is lost or broken during the

shipping or transportation due to whatever may be the reason. Vendor is responsible to ensure, by contacting the University, that the shipping has been properly done i.e., all the items/goods have properly reached the University.

26. Inspection and Acceptance: Material procured from vendor shall be inspected and tested by the University or its designee at vendors cost. If deemed necessary by the University, the Vendor shall provide without charge, all reasonable facilities and assistance for such inspection and test. Any inspection records relating to Material covered by this agreement shall be made available to the University during the performance of the order.

a. If any Material covered by this agreement is defective or otherwise not conforming to the requirements of this agreement, the University may, by written notice to the Vendor:
   i. rescind the purchase/supply order as to such non-conforming Material;
   ii. accept such material at an equitable reduction in price;
   iii. reject such non-conforming material and require the delivery of suitable replacements

b. If the vendor fails to deliver suitable replacements promptly, the university, with notice of seven business days, may replace or correct such material and charge the vendor the additional cost occasioned thereby, or terminate this order for default.

c. No inspection (including source inspection) test, approval (including design approval) or acceptance of material shall relieve the Vendor from responsibility for defects or other failures to meet the requirements of this order. Rights granted to the University in this article entitled INSPECTION is in addition to any other rights or remedies provided elsewhere in this order or in Law.

27. Invoicing / Payments / Set-Offs: After completion of supply against the purchase order, the Vendor shall send duplicate invoices including item number to the University's concern Department. Payment of invoice shall not constitute acceptance of Material ordered and shall be subject to appropriate adjustment, if the Vendor failed to meet the requirements of this agreement. The University shall have right at any time to set-off any amounts due to the Vendor, (or any of its associated or affiliated companies) against any amounts owed by the University with respect to this agreement.

28. Selection of the Bidder: For the purpose of selection of the bidder, a two-stage bidding process will be followed. The response to the tender should be submitted in two parts viz. Technical Bid & Commercial Bid.

a. Technical Bid: Technical bid should contain information regarding the company/firm registration details, Authorization letter, Clientele list (List of Users), Performance certificate from clients, self-declaration for not black listed, business turnover, experience and other details of the firm to judge the suitability of the bidder. *The Bidder should attach supporting documents in sequence with proper page numbers and indexes*. Bidder must ensure the following conditions while going for the bidding:

I. SPECIFICATIONS: Specifications are basic essence of the product/contract. It must be ensured that the offers must be strictly as per our specifications mentioned at Annexure-A at technical specification section. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected /supported by the printed technical leaflet/literature. Therefore the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation.

II. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.

III. OEM should be internationally/Nationally reputed Branded Company.

IV. Copy of mandatory test reports, national testing/reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories.

V. A write up on service and maintenance capability, mitigation of risks or breakdown and replacement capability, with the escalation support matrix suggested for the University.

Vendors must indicate their sales and support service center in India and their plan to address issues about services, maintaining minimum service inventory etc.

VI. Signed & Stamped compliance sheet of the technical specification of the offered equipment with technical printed literature must be enclosed with the technical bid in the prescribed format.

VII. Clientele list (List of the institutes/organizations, where the similar order has been executed during the last three years) and work done list. Supporting documents (couple of orders without any alteration/modification, copies of installation report and performance certificate) must be enclosed. Past Performance of the Vendors will be judged at the time of Technical Evaluation.

VIII. Average Annual turnover of the bidder, for the last three successive years should be four times of the approximate cost of the equipment duly certified by the Chartered Accountants.

IX. Self-attested photocopy of annual turnover, IT clearance Certificate, Audited Balance Sheet, etc. for last three years.

X. The bidder/OEM self-declaration stating that he/she is not banned/debarred or black listed by any Central/State Govt. of India/PSU/Organizations/Institutes in India or abroad in prescribed format.

XI. DD for Tender Fee & EMD amount as applicable.

XII. University reserves the right to carry out a technical inspection and performance evaluation (benchmarking) of the offers, made by shortlisted vendors. The shortlisted vendors may be asked to come and give out presentation / demonstration.

b. Short listing of Bidder: University will shortlist bidders, who found technically qualifying and the financial bid of only these bidders will be opened. University reserves the right to decide whether the items being quoted are as per the requirement of the University and are of standard/leading brands in the market. University reserves the right to decide which offer best suits the requirement of the University. Further, after opening financial bids of the short listed bidders, if there is a discrepancy between word and figure, the amount indicated in words will prevail.

c. Price Bid/ Financial Bid: Financial bid should contain price of the material required to be supplied as per Price Schedule *Annexure-B* as supplied by the University along with tender form, duly filled and signed by the authorized person.

Note: - Cost of CMC for 4th to 6th year will also be considered for evaluation of total cost/price of the equipment for deciding the lowest responsive bidder.

However, payment of CMC cost will be released after entering in to CMC agreement & after successful expiry of warranty period. Payment will be released on half yearly installment, as per GFR-2017.

Further, payment towards AMC charges will also be released as per provision of GFR 2017 & after entering in to AMC agreement.

29. Installation and Commissioning: Free of cost at University. The OEM must ensure timely installation of the complete unit with necessary support to the purchasers, as per details and lists to be made available to the Stores Section or the purchasing Departments/Centre/Schools.

30. Conditional Offer will not be accepted.

31. Rejection of Bids:

a. If bidders give wrong information in their bid, University reserves the right to reject such bids at any stage and forfeit the Earnest Money Deposit / Performance Bank Guarantee and cancel the order, if awarded.

b. If the technical offer contains any price information the offer will be summarily rejected.

c. Canvassing in any form in connection with the tender is strictly prohibited and the bids submitted by the bidder who resort to canvassing are liable for rejection.

d. Unsigned tenders/bids, unattested corrections and over writing by bidders are also liable for rejection.

e. Bids submitted without supporting documents as mentioned or required to submit with bids are liable to be rejected.

f. The Tenderers must confirm in their bid acceptance in full of the terms and conditions in this enquiry. Any non-acceptance or deviations from the terms and conditions must be clearly brought out. However, tenderers must note carefully that any conditional offer or any deviation from the terms and conditions of this enquiry may render /liable the Quotation for rejection.

32. Liquidated damages for delayed supply: If vendor fails to deliver any of or all products or does not perform the services within the period specified in the contract, the University reserves the right to, without prejudice to its other remedies under the contract, deduct from the bill, a sum equivalent to 1% of the price of undelivered stores at the agreed price for each week to maximum limit of 10% of the value of stores so undelivered. Once maximum is reached, the University may consider termination of contract.

33. Assignment / Subcontracting /sublet: The Vendor shall not assign the order received, any rights under this agreement or to become due hereunder neither delegated nor subcontracted /sublet any obligations or work hereunder without the prior written consent of the University.

34. Cancellations of tender: The University reserves Right to Accept any Bid and to Reject any Or all Bids: The Purchaser also reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

The University may cancel agreement entered with vendor in whole or in part, for no cause, upon written, FAX, or telex notice to the Vendor, effective when sent, provided such notice is sent ten (10) days prior to the delivery date, specified on the face of this order, in the event that the vendor:

a. fails to comply with any term or condition of this order including, but not limited to, delivery terms; or
b. appoints a receiver, liquidator or trustee in bankruptcy or other similar officer over any or all of its property or assets; or
c. files a voluntary petition in bankruptcy; or
d. has had filed against it an involuntary petition in bankruptcy which remains in effect for thirty (30) days; or
e. voluntarily ceases trading; or
f. merges with or is acquired by a third party; or
g. Assigns any of its rights or obligations under the Order to a third party without the University's prior written consent.

Upon the occasion of any one of the aforesaid and in addition to any remedies which the University may have in Law or in Equity, the University may also cancel this order or any outstanding deliveries hereunder by notifying the Vendor in writing of such cancellation and the Vendor shall thereupon transfer title and deliver to the University such work in progress or completed material as may be requested by the University. The University shall have no liability to the Vendor beyond payment of any balance owing for Material purchased hereunder and delivered to and accepted by the University prior to the Vendor's receipt of the notice of termination, and for work in progress requested for delivery to the University.

35. Warranty:-

a. Three year comprehensive onsite warranty & as mentioned in the technical specification section with the statement of availability of spares, Hardware, Consumables, Electronic Boards etc. for at least 10 years from the date of the installation of equipment, against any manufacturing defects and also give the warranty declaration that everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship, transportation hazards, and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specifications. During the warranty period, replacement of any part of equipment or rectification of defects of works will be free of cost.
b. Any deviation in the material and the specifications from the accepted terms may liable to be rejected and the bidders need to supply all the goods in the specified form to the satisfaction / specifications specified in the order / contract and demonstrate at their own cost. The payments shall be made only after receiving the material in the required specifications and quality to the satisfaction of the University authorities.

c. Downtime: During warranty period not more than 5% downtime will be permissible. For downtime exceeding penalty equivalent to 0.50% of the F.O.R. value of the equipment for every week or part thereof may be imposed. Downtime will be counted from the date and time of the filing of complaints within the business hours of the tenderer.

d. The Vendor shall warrants that any Material supplied hereunder shall conform to the generally recognized manufacturing and safety standards of the Vendor's industry or as per Indian Standard Institution (ISI) or similar standard. The Vendor's specifications on performance as detailed in the Vendor's brochures, sales literature and other specifications as may be available to the University.

e. Vendor should provide insurance up to the delivery point (on-site and not up to the nearest international airport) and until the time of installation.

f. Vendor shall provide at least two preventive maintenance service per year during the warranty period.

g. In addition to any other express or implied warranties, the Vendor warrants that the material furnished pursuant to this order will be

(i) Free from defects in design except to the extent that such items comply with detailed designs provided by the University; of merchantable quality and suitable for the purposes, if any, which are stated in the tender/quotation.

(ii) This warranty provision shall survive any inspection, delivery, acceptance, payment, expiration or earlier termination of this order and such warranties shall be extended to the employees, students, and users of the material. Nothing herein, however, shall limit the University's rights in law or equity for damages resulting from delivery of defective goods or damage caused during the delivery of goods or provision of services.

(iii) Rights granted to the University in this article entitled WARRANTIES are in addition to any other rights or remedies provided elsewhere in this order or in Law.

36. Consumables/spares: All hardware & software including drivers, device interface cards/network adaptor card must be pre-installed & pre-configured in the computer /equipment provided.
Licensed version of system software should be provided in CD (with up-gradable version). if such system is also a part of supply.

Manual - Hard copies of instruction/operation/service manuals should be supplied. List of important Consumable/ Spares and parts having sufficient shelf life for trouble free operation of three years should also be provided.

37. Training/installation: Installation testing: suppliers of the instrument must provide free installation, commissioning and testing of the equipment in the laboratory of the Central University of Rajasthan & training is to be provided as mentioned in technical specifications section.

38. Patent Indemnity: The Vendor shall have to indemnify, hold harmless and defend the University, its employees, and students with respect to all claims, suits, actions and proceedings of actual or alleged infringements of any Letter, Patent, Registered or Industrial Design, Trademark or Trade Name, Trade Secret, Copyright or other protected right in any country resulting from any sale, use or manufacture of any Material delivered hereunder and to pay and discharge all judgments, decrees, and awards rendered therein or by reason thereof and bear all expenses and legal fees (including the University's) associated herewith. The University reserves the right to be represented in any such action by its own counsel at its own expense.

39. Compliance with Laws: After acceptance of tender, successful bidder shall have to comply with the requirements of all the existing laws. The Vendor shall also have to comply with the Fair Labour Standards Act and the Occupational Safety and Health Act, and all other applicable laws, ordinances, regulations and codes in the Vendor's performance hereunder. The Vendor will have to indemnify and hold the University and its customers harmless from any loss or damage that may be sustained by the University, by reason of the Vendor's failure to comply with any laws, ordinance, regulations and codes.

40. Law of the Contract: The agreement entered with vendor shall be governed by and interpreted in accordance with the laws in existence and the Jurisdiction of Rajasthan.

41. Site preparation: The supplier shall inform the University about the site preparation, if any, needed for installation, immediately after receipt of the supply order. Suppliers must provide complete details regarding space and all infrastructural requirements needed for the equipment which University should arrange before the arrival of equipment to ensure its early installation and smooth operation thereafter. The supplier may offer his advice and render assistance to University in the preparation of the site and other pre- installation requirements.

42. One-time shifting and re-installation: Instrument may need shifting and reinstallation. If needed one-time shifting and re-installation is to be done free of cost.

43. The OEM (Original Equipment Manufacturer) should be an ISO-9000 or ISO-14001 certified company with due credits to energy conservation and green earth compliance. While the above procedures lay down the overall guidelines, Central University of Rajasthan reserves the right to select the vendor based on other parameters, at its discretion.

44. Delivery and Opening of Tender: All tender documents should be sent through courier, speed post, registered post or by person. Telegraphic / fax offer will not be considered and ignored straightway. All tender documents received after the specified date and time shall not be considered. The completed tender should be delivered at the Inward Section of the Administrative building of the Central University of Rajasthan, Bandarsindri, Ajmer, Rajasthan-305817.
The Technical Bid will be opened on 03..01.2026

I/We have read all the enclosed Terms and Conditions carefully and ready to accept and according to that I/We are submitting herewith the tender.

Seal & Signature of Vendor

6. TECHNICAL SPECIFICATIONS SECTION

Technical Specifications: The tenderer shall meet the respective minimum technical specifications for the item that is being bid for. Any additional features or specifications in excess of these minimum specifications will be appreciated. A set of desired additional features are mentioned along with the minimum technical specifications, wherever appropriate.

I / We the undersigned am / are ready to supply & install the following instruments along with all other accessories complete as mentioned below with accepting the terms and conditions which are enclosed with this order form and quote for the same

The technical specifications for the Instrument are being placed under this tender have been detailed in the "Annexure A". This will also include all the components of the particular instrument / equipment that are being tendered for.

S. No.	Instrument/Equipment
1.	Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Control Room with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan

CENTRAL UNIVERSITY OF RAJASTHAN

Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Central Control Room with 3 Years Comprehensive On-site Maintenance Contract at Central University of Rajasthan

7. TECHNICAL SPECIFICATIONS

Technical Specifications: The tenderer shall meet the respective minimum technical specifications for the item that is being bid for. Any additional features or specifications in excess of these minimum specifications will be appreciated. A set of desired additional features are mentioned along with the minimum technical specifications, wherever appropriate.

I / We the undersigned am / are ready to supply & install the following items along with all other accessories complete as mentioned below with accepting the terms and conditions which are enclosed with this order form and quote for the same

The technical specifications for Supply, Installation, Testing and Commissioning (SITC) of the item are being placed under this tender have been detailed in the "**Annexure A**". This will also include all the components of the particular item that is being tendered for.

S. No	Item Description	Unit	Qty
1.	SITC of 5MP or Higher Outdoor Motorized lens Bullet Camera with mounting fixture on outdoor 6 Mtr poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	95
2.	SITC of 5MP or Higher Outdoor Motorized lens Bullet ANPR Camera with mounting fixture on outdoor 6 Mtr. poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4
3.	SITC of 4MP or Higher Outdoor PTZ camera with mounting fixture 6 Mtr poles, including 512GB Class-10, SD Card (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4
4.	SITC of Unified VMS Software solution with perpetual (Lifetime) licenses with Failover function, scalable up to a thousand cameras, including 5 client viewing licenses, with 3 years onsite comprehensive warranty and maintenance support.	Set	1
5.	SITC of VMS software Camera perpetual (Lifetime) License for 300 Cameras with 3 years onsite comprehensive warranty and maintenance support.	Nos.	300
6.	SITC of VMS software, Desktop/Mobile Client perpetual (Lifetime) license with built-in Camera function, Mobile camera should be live view & Recording on VMS in the Main control room with 3 years onsite comprehensive warranty and maintenance support.	Nos.	10
7.	SITC of the ANPR Software perpetual (Lifetime) license with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4

8.	SITC of Video Management server with Failover for Up to 1000 cameras with edge video Analytics applications Processing functions with 3 years onsite comprehensive warranty and maintenance support.	Nos.	2
9.	SITC of Dual Controller Video Storage Server Appliance for 30 days of recording with a minimum of 480TB raw storage expandable up to 2 Petabytes of storage with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1
10.	SITC of PTZ Camera Control joystick Keyboard with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1
11.	SITC of Workstation for Client Monitoring & Video wall control - i9, 64GB, 2X480 GB SSD, 1xNvidia RTX 4070 Graphics card with 3 years onsite comprehensive warranty and maintenance support	Nos.	2
12.	SITC of Workstation for Client Monitoring - i7, 32GB, 480 GB SSD, with NVidia 6GB Graphics card with original Windows 11 Pro, including 21" or higher monitor with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
13.	SITC of Laptop - i7, 8GB, 480 GB SSD, with inbuilt 2GB Graphics with original Windows 11 Pro with 3 years onsite comprehensive warranty and maintenance support.	Nos	1
14.	SITC of LED Monitor, 55" 4K, 24x7 Rated for Control Room with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
15.	SITC of LED Monitor, 24" Full HD for Control Room with 3 years onsite comprehensive warranty and maintenance support.	Nos	2
16.	SITC of Network Switch, L2 Managed, 24 Port with 2SFP Port with 3 years onsite comprehensive warranty and maintenance support.	Nos	1
17.	SITC of 10G SFP Module should same make of the existing network L3 Switch with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
18.	SITC of L3 Network Switch, Managed, 24-Port with 3 years onsite comprehensive warranty and maintenance support.	Nos	1
19.	SITC of Network Switch, Managed, 8 Port, PoE, indutrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.	Nos	4
20.	SITC of Network Switch, Managed, 4 Port, PoE, industrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.	Nos	40
21.	SITC of RF Wireless backhaul Radio with 3 years onsite comprehensive warranty and maintenance support.	Nos	12
22.	SITC of RF Wireless Base Station Radio with 3 years onsite comprehensive warranty and maintenance support.	Nos	7
23.	SITC of RF Wireless Base Station Sector antenna with 3 years onsite comprehensive warranty and maintenance support.	Nos	7
24.	SITC of RF Wireless CPE Radio with Integrated Antenna on outdoor poles with 3 years onsite comprehensive warranty and maintenance support.	Nos	58
25.	SITC of LFP battery-based DC 90VA outdoor UPS or higher for Field Devices, with a minimum of 1 hour. Battery Backup for connected devices with 3 years onsite comprehensive warranty	Nos	58

	and maintenance support.		
26.	SITC of Pole Mount Outdoor Junction Box with Din-Rail Arrangement with 3 years onsite comprehensive warranty and maintenance support.	Nos	58
27.	SITC of Cat 6 Armoured STP LAN Cable including conduit and required fixtures with 3 years onsite comprehensive warranty and maintenance support.	Mtr	900
28.	Supply and fixing of 6 Meter Pole with foundation with 3 years onsite comprehensive warranty and maintenance support.	Nos	58
29.	Works of Testing, Configuration, Firmware Update, IP Re-Allocation & Re-commissioning of the Existing Camera and Network Switches in the proposed system, including Works of OTDR Testing & rectification of any faults, including fiber splicing & pigtail as required in the Existing Optical Fiber cable backbone of the CUR Network & Works of Penta scanning & rectification of any faults in the existing Cat-6 cable LAN network, including repunching of I/O Modules & Patch Panels of the CUR network for existing cctv system.	Job	1
30.	Works of Unified Video Surveillance System and CCTV Control room Re-Commissioning, Software configuration, Customization & user training Services with Integration of the Existing Active & Passive ITC LAN System with the proposed Solution	Job	1
31.	Supply and laying of Electrical works with 3 years onsite comprehensive warranty and maintenance support as per actual measurement/requirement 31.1) Supplying of 3 X 2.5 sq. mm PVC insulated and PVC sheathed / XLPE, copper conductor armored power cable of 1.1 KV grade	RMT	6000 (Tentative)
	31.2) Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Nos.	60 (Tentative)
	31.3) Supplying and fixing 20 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole and neutral.	Nos.	60 (Tentative)
32.	Providing and carrying out Civil work including laying/ excavation/digging work in all types of as per actual measurement/requirement with 3 years onsite comprehensive warranty and maintenance support 32.1) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation and refilling the trench etc as required.(3 X 2.5 sq. mm)	RMT	4500 (Tentative)
	32.2) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on the existing poles/wall as required. (3 X 2.5 sq. mm)	RMT	1500 (Tentative)

	32.3) Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Nos	60 (Tentative)
33.	Resident one engineer (Skilled) for 3 years onsite maintenance support	Months	36

1. The bidder shall be required to obtain MAF certificate from OEM for supply items mentioned in above table at Sr. No. 1 to 28 and 31.
2. Scope of Work & Additional Terms & Conditions (ATC) should be provide on bidder letter head for Implementation, Installation, Commissioning and Integration with existing IP Camera and connectivity along with 3 years Comprehensive warranty and support.
3. It is advisable to inspect location to understand the actual requirement of university on all working days between 10.00 A.M to 5.00 P.M.

Annexure A-1

Technical Specification for Wireless CCTV Surveillance System

Technical Specification Compliance Sheet

1. The technical compliance bid must be in this sheet only, otherwise is should be assumed that bidder is not able to offer technically desired product. Information provided elsewhere or in different form will not be considered.
2. All the columns of this sheet should be filled in compulsorily by the bidder, merely asking the office to refer catalogue or brochure will not be entertained.
3. The bidder shall assume full responsibility of the information provided in this sheet. Any false statement should render the breach of basic foundation of the tender.

Sr. No	Name and Description	Qty.	Units	Whether provided is complied with the given specification (Yes / No)
1.	**SITC of 5MP or Higher Outdoor Motorised lens Bullet Camera with mounting fixture on outdoor 6 Mtr poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.** **Quality Image** Minimum 5-megapixel (2560x1920/ 2592×1944) or higher 1/2.8" progressive scan CMOS Sensor or Better **Stream Capability** Quad Stream **Motorised Lens** 2.7 mm to 13.5 mm (or better) **Day/night operation** The camera should provide day/night functionality automatically switches to night mode in low light scene **Minimum illumination** Colour mode: F1.2-F1.4 @0.04 lux light sensitivity Minimum 0.01 Lux (Color) or better and 0 Lux or better Black and white mode: F1.2 @0.2 lux **IR** Minimum 50 Meter or Higher **Video compression** H.265/H.264/MJPEG or better **Resolutions and frame rates (H.265)** At 5MP or Higher @ 20/25/30 FPS. **PoE** It should be PoE enabled **HLC/ WDR(120dB)**	95	Nos	

	Supported **Alarm IN** Yes **Alarm OUT** Yes **Audio I/O** Audio in x 1 Audio out x 1 **Certification** The OEM Shall be BIS, CE, FCC, ISO certified, Essential Requirement (ER) by STQC **Local storage (Micro SD)** Supply Built in 512GB SD Card along with camera or higher **Supported protocol** TCP/IP, IPv4/ IPv6, SSL/TLS, UDP, HTTP/HTTPS, DHCP, DNS, RTP, ICMP, RTCP, NTP, SMTP, IGMP/Multicast. **Housing** IP66, IK10 **Operating Temperature** –30 °C to +60 °C (–22 °F to +140 °F) 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
2.	**SITC of 5MP or Higher Outdoor Motorised lens Bullet ANPR Camera with mounting fixture on outdoor 6 Mtr poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.** **Image Sensor** 5MP or higher (2560x1920/ 2592×1944) or higher progressive scan 1/2.8”, 1/1.8” CMOS or Better **Stream Capability** Quad Stream **Motorised Lens** 2.7 mm to 13.5 mm (or better) **Day/night operation** The camera should provide day/night functionality automatically switches to night mode in low light scene **Minimum illumination** Color: 0.001Lux (F1.2, AGC ON), 0.014 Lux @ (F1.4, AGC ON), 0 Lux with IR, F1.2 @0.04 lux or better **IR** **Internal/ External IR Illuminator 30 to 100 Meter or better** **Video compression** H.265/H.264/MJPEG **Resolutions and frame rates (H.265)** At 5MP or Higher @ 30 FPS. **PoE** It should be PoE enabled **HLC/ WDR(120dB)** Supported	4	Nos	

	Alarm IN Yes **Alarm OUT** Yes **Audio I/O** Audio in x 1 Audio out x 1 **Certification** The system shall be OEM Shall be BIS, CE, FCC, ISO certified, Essential Requirement (ER) by STQC **Local storage (Micro SD)** Supply Built in 512GB SD Card along with camera or higher **Supported protocol** TCP/IP, IPv4/ IPv6, SSL/TLS, UDP, HTTP/HTTPS, DHCP, DNS, RTP, ICMP, RTCP, NTP, SMTP, IGMP/Multicast. **Housing** **IP67,IK10 ,PoE, IR , Fan & Heater** **Operating Temperature** –30 °C to +60 °C (–22 °F to +140 °F) 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
3.	**SITC of 4MP or Higher Outdoor PTZ camera with mounting fixture 6 Mtr poles, including 512GB Class-10, SD Card (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.** **Image device** 1/2.8", 4MP or higher Low Illumination Progressive Scan CMOS Sensor or better **Horizontal Resolution** Minimum 4MP or better as applicable **Frame rate** Mainstream: 4MP or better (2560x1440) or better @25/30fps / 1080P(1920x1080) or better Sub Stream: 720P(1280x720)@25/30fps or better Third Stream: VGA(640x480)@15fps or better **Compression** MPEG4/H.265/H.264 support **Streaming** Minimum 3 streams or better **Alarm output** Minimum 1 **Alarm input** Minimum 1 **Focus mode** Auto/Zooming/One push manual **IR Distance** 250 Meter or better **Panning range & speed** 0 degree to 360 degree endless, max 200 degree per second **Tilting range and speed**	4	Nos	

	0 to 15 degree above horizontal to 90 degree down, max 120 degree per second **Presets** 50 presets or higher **Group Touring** Auto track, Auto pan, preset control, patrol modes **Pre/Post alarm buffer** Yes **ID/Password** User ID/Password HTTP (SSL/TSL) **Physical Layer** 10/100 base Tx Ethernet **Protocol** Minimum TCP/IP, HTTP, RTP, RTSP **IP support** Static/dynamic or both **Remote administration** Remote configuration and status using web based tool **System update** Remote system update over network using web client **PC client** PC application client with a channel recording feature support **Web client** Viewer through HTTP (min) system configuration setting /streaming **Simulations connection** 5 user or more **Lens type** 4.5~162mm or better motorised Varifocal, Autofocus, Auto-iris **Wide dynamic range** True WDR 120dB or equivalent or better **Auto exposure** Automatic level control/electronic level control **Minimum illumination** 0.005 or better Lux @ (F1.2-F1.6, AGC ON), 0.014 Lux @ (F1.4-F1.6, AGC ON), 0 Lux with IR **Motion detection zones** 4 or higher privacy zone **Auto gain control** Yes **White balance** Yes **Day and night** Yes (as per minimum illumination) **Iris control** Yes for varifocal cameras **Operating temperature** –30 °C to +60 °C (–22 °F to +140 °F) **Power source** Device shall work on PoE. Suitable PoE power injector or 230V AC power adaptor shall be included. **Housing-outdoor** Aluminum construction with IP-66 /IK 10 rated			

	Mounting bracket Standard wall mount for indoor & pole mount for outdoor as indicated in the supply order **Local storage (Micro SD)** Supply Built in 512GB SD Card along with camera or higher **Certification** The OEM Shall be BIS, CE, FCC, ISO certified, Essential Requirement (ER) by STQC 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
4.	**SITC of Unified VMS Software solution with perpetual (Lifetime) licenses with Failover function, scalable up to a thousand cameras, including 5 client viewing licenses, with 3 years onsite comprehensive warranty and maintenance support.** **VMS General Requirements** The VMS shall be based on a true open and Cloud ready architecture that shall allow the use of non-proprietary workstation and server hardware, non-proprietary network infrastructure and non-proprietary storage. The VMS application provider must support at least 50 + brands of Cameras and the list of integrations must be listed on the global web site of the application provider. The VMS shall integrate cameras using dedicated driver or using the industry standards ONVIF Profile S and Profile G, Profile T. The same must be listed on the ONVIF website. The Proposed VMS Solution Shall support native Fail over with in application with no dependency on any external application for both hardware and application redundancy. Solutions with external clustering like Windows, NEC etc. should not be proposed. The native fail-over architecture must be for both management and recording servers. The VMS shall support changing passwords of video units (for a list of supported units) . The VMS shall show the strength of the current unit password. •The VMS shall have the ability to change the password •The VMS shall have the ability to automatically update passwords on schedule. •The VMS shall keep the history for passwords and the ability to retrieve them. •The VMS shall have the ability to export passwords of units for safekeeping. The VMS shall support managing certificates of video units used for secure command and control (HTTPS and RTSPS) (for a list of supported units publish on website): •Push Initial Certificate •Automatically switch from HTTP and RTSP to HTTPS and RTSPS •Allow certificate renewal •Manage certificates manually for a single device or a batch	1	Set	

	of devices •Automatically update upon configured schedule for single device or batch of devices The VMS shall allow for the configuration of a time zone for each camera. For playback review, users shall have the ability to search for video based on the following options: •Local time of the camera •Local time of the SSM (Server Software Module) •Local time of user's workstation •GMT Time •Other time zone VMS shall support Audio and Video storage configuration for the Server Software Module shall either be: •Internal or external IDE/SATA/SAS organized or not in a RAID configuration. •Internal or external SCSI/iSCSI/Fiber Channel organized or not in a RAID configuration. • Within the overall storage system, it shall be possible to include disks located on: a. External PCs on a LAN or WAN b. Network Attached Servers (NAS) on a LAN or WAN c. Storage Area Networks (SAN) The VMS shall be based on a client/server model. The VMS shall consist of a standard Server Software Module (SSM) and Client Software Applications (CSA). The VMS shall be an IP enabled solution. All communication between the Server and Client shall be based on standard TCP/IP protocol and shall use TLS encryption with digital certificates to secure the communication channel. Solution shall be able to deploy the VMS on a single server or across several servers for a distributed architecture. The VMS shall not be restricted in the number of Server deployed. Multicast Support in Video Management System (VMS) The system shall ensure optimized network utilization and support industry-standard multicast protocols, including but not limited to IGMP snooping and appropriate multicast routing mechanisms. The Video Management System (VMS) shall support end-to-end multicast video traffic and enable the following traffic flow patterns: • VMS Client Video Stream Handling VMS client applications shall be capable of directly receiving live video streams from cameras over multicast thereby reducing latency and ensuring efficient bandwidth utilization across the network. • Recording Server Multicast Reception The VMS Recording Servers—whether operating in Primary, Standby, or Redundant configurations—shall be capable of directly receiving and recording multicast video streams from camera sources. Roles-Based Architecture			

	• The VMS shall consist of a role-based architecture, with each SSM hosting one or more roles. • Each role shall execute a specific set of tasks related to either Management role, recording role Installation shall be streamlined through the ability of the VM to allow administrators to: d. Deploy one or several Module across the network prior to activating roles. e. Activate and deactivate roles as needed on each and every Server. f. Centralize role configuration and management. g. Support remote configuration. h. Move roles over from one Server to another Server Monitoring Service (Watchdog): • The VMS shall include a Server Monitoring Service that continuously monitors the state of the Server Software Module (SSM) service. • The Server Monitoring Service shall be a Windows service that automatically launches at system startup, regardless of whether or not a user is logged into his account. • The Server Monitoring Service shall be installed on all PCs/servers running an SSM. In the event of a malfunction or failure, the Server Monitoring Service shall restart the failed service. As a last resort, the Server Monitoring Service shall reboot the PC/server should it be unable to restart the service. Functionalities available with the VMS shall include: • Configuration of embedded systems, such as Cameras, PA systems. • Live event monitoring. • Live video monitoring and playback of archived video. • Alarm management. • Reporting, including creating custom report templates and incident reports. • Microsoft Active Directory integration for synchronizing VMS user accounts • SIP Intercom device integration for bi-directional communication. • Dynamic graphical map viewing. Dynamic Graphical Maps (DGM) support: A. VMS shall support Dynamic Graphical Maps(DGM) Interface to monitor all camera entries B. The VMS shall provide a map centric interface with the ability to command and control all cameras VMS capabilities from a full screen map interface. C. It shall be possible to span the map over all screens of the VMS client station. In the scenario where the map is spanned over all the screens of the USP client station it shall be possible to navigate the map including pan and zoom, and the map's moves shall be synchronized between all screens. Spanning the map over multiple screens must provide the same command and control capabilities than in a single screen display. D. The VMS shall support the following file format and			

	protocol for importing map background: 1. PDF 2. JPG 3. PNG 4. Web Tile Map Service (WTMS) and Web Map Service (WMS) 5. BeNomad 6. AutoCAD (DWG & DXF) E. The VMS shall support the following online map providers for use as map background to add camera entity. The procurement and licensing of online map services shall be under the scope of the System Integrator (SI) or the end customer, as applicable to the project. 1. Google Map, aerial, terrain 2. Bing Map(azure maps) 3. ESRI ArcGIS F. VMS shall be possible to configure a mixed set of maps made of GIS, online providers, and private imported files and link them together. G. The VMS shall provide the ability to display all native entities of the including: 1. Cameras, fix, and PTZ 2. Camera sequences 3. Alarms H. The VMS shall provide the ability to draw and display information over the map in the form of: 1. Vectoral shapes: lines, rectangles, polygons, ellipse 2. Pictures 3. Text I. The DGM shall provide the ability to the operator to manage layers of entities displayed over the map, being able to turn them on and off and changing the superimposition order. J. The VMS shall provide the ability to import configuration from an external file such as: 1. AutoCAD layer for objects 2. CSV, Excel file K. The VMS shall provide the ability to print a map in the following file formats: 1. PDF 2. PNG L. The user shall be able to select and display the content of multiple VMS entities on the map in pop-up windows. M. It shall be possible to access live and playback video from the map and possible to pin the camera type in map. N. It shall be possible to monitor all entity event notifications from the DGM. Users shall be able to turn notifications on and off per entity. O. The VMS shall offer the ability to fully operate alarm monitoring. It shall be possible to: 1. Center the map on entities related to the alarm. 2. Visualize the Alarm notifications on the map and access the related videos from the map. 3. Trigger and receive alarms.			

	4. Act on the alarm from the Map , including acknowledgements, forwarding, and investigation. 5. Visualize that an alarm occurred in an underlying linked map. P. The DGM shall provide search and center by entity name(camera name). **Cyber Security Requirements** The VMS shall be an IP enabled solution. All communication between the Server and Client Software shall be based on standard TCP/IP protocol and shall use TLS encryption with digital certificates to secure the communication channel. The VMS shall support user authentication with claims-based authentication using external providers. External providers shall include: • ADFS (Active Directory Federation Services) • Azure Active Directory (through OpenID Connect) • Ping Identity (through OpenID Connect) • KeyCloak (through OpenID Connect) •Other Open ID Connect / SAML2 authentication agents The VMS shall limit the IP ports in use and shall provide the Administrator with the ability to configure these ports The VMS shall support only secured media stream requests, unless explicitly configured otherwise. Secured media stream requests shall be secured with strong certificate-based authentication leveraging RTSPS (RTSP over TLS). Client authentication for media stream requests is claims-based and may use a limited lifetime security token The VMS shall offer the ability to encrypt the media stream, including video, audio, and metadata with authenticated encryption. Media stream encryption shall be done at rest and in transit and be a certificate-based AES 128-bit encryption. The VMS shall • Allow encryption to be set on a per camera basis for all or some of the cameras. • Provide up to 20 different certificates for different groups of Servers or users who have been granted access to decrypted streams. • Not decrease the recording performance by more than 50% when encryption is enabled. • Use Secure RTP (SRTP) to encrypt the payload of a media stream in transit and allow multicast and unicast of the encrypted stream. • Use a random encryption key and change periodically. • Allow encrypted streams to be exported The VMS shall support end to end encrypted streams with cameras supporting Secure RTP (SRTP) both in unicast and multicast from the camera. The VMS shall support encryptions for all communications with its MS SQL databases The Video Management System (VMS) shall not use any proprietary or closed-format database for its Recording Server and Management Server functions. The VMS shall utilize a standard SQL-type database (such as Microsoft			

	SQL Server, PostgreSQL, or equivalent) for configuration, management, and archival metadata. The VMS shall provide in its main user interface a visual list Dashboard showing the state of all configuration items relating to the cyber security hardening of the features of the system. The VMS shall provide recommendations relating to the passwords used to access the hardware units in the system. The recommendation should display if the passwords used on the units are weak, average, strong, or very strong. The VMS shall provide the ability to manually or automatically change the video unit passwords with manufacturer's native API. The VMS shall support password change for video units as follows: • In batch or per unit • On schedule • From an event • Based on manufacturer's policies • The VMS shall allow backup of last 5 passwords. • The VMS shall provide the ability to export the video unit passwords if the user has the appropriate privileges. The VMS shall provide recommendations relating to the firmware of the hardware units enrolled in the system. Recommendations should display if the firmware is up to date, out of date, or if it has known security vulnerabilities. **Failover and Standby Requirements** The Proposed VMS Solution Shall support native Fail over with in application with no dependency on any external application for both hardware and application redundancy. Solutions with external clustering like Windows, NEC etc. should not be proposed. The native fail-over architecture must be for both management and recording servers. Failover management Server • The Standby management Server shall act as a replacement SSM on hot standby, ready to take over as the acting Management server in case the primary Management server fails. The failover shall occur in less than one minute. No action from the user shall be required. • The VMS shall support up to five (5) Management server on standby, lined up to take over as the acting management role in a cascading fashion. • The Standby Management server shall keep its configuration database synchronized with the primary Management. • The Standby management shall support disaster recovery scenarios where a server can be located in another geographic area (or building) and only take over if all other Management server become offline. • The Standby management server shall support synchronization of the configuration databases using a			

	backup and restore mechanism. The synchronization period shall be configurable from 15 minutes to 1 week. • The Standby management server shall support real-time synchronization of the configuration databases using SQL Mirroring or SQL Always On. Failover Recording Server: The solution must support the configuration of: • Standby Recording, which remains idle and only starts recording upon failure of the primary Recording server. • Redundant Recording, which continuously records video in parallel with the primary Recording. Standby Recording Role/Engine: • The Standby Recording Role shall act as a replacement Recording role on hot standby, ready to take over the functions of the primary Archiver role. The failover will occur in less than 1 minute. No action from the user will be required • The Standby Recording Role assigned to an Main Recording role entity shall automatically provide protection for all IP devices connected to that Main Recording role. • The Standby Recording Role shall protect the primary Recording role against the following failures: Server failure (hardware or software). Storage failure, such as Archiver Role detects that it cannot read or write to any of its allocated disks • It shall be possible for a single Recording server to act as the standby server of multiple Recording roles. • Each Recording role shall have priority value if multiple Recording Roles fail at the same time on the same standby server • Cross failover: It shall be possible for any Recording role in the system to be designated as another's standby and vice-versa so it shall be support cross failover for each recording server • Ternary failover for each Recording role it shall be possible to set up to 2 standby Archiver so that if the first failover Archiver fails the failover will automatically occur to a third server. Redundant Recording: • The Standby Recording shall have the ability to act as a Redundant Archiver • It shall be possible to set a different retention period for the Archiver and the Redundant Archiver. • The Redundant Archiver shall have the ability to maintain an exact copy of everything recorded by the default Recording and/or to configure different recording qualities, i.e., audio/video archives, events, and bookmarks • Redundancy shall be configured on a camera-by-camera basis. • The Redundant Recording shall have the ability to use a multicast video stream from the IP camera and shall not require an additional connection to any Cameras so optimize overall bandwidth. • Each camera shall be added only once for			

	configuration, even in redundant recording setups. The VMS shall maintain a consistent and unique camera ID for that camera across all recording servers Mix mode Redundant & Standby Recording: • Redundant or Standby Recording can have different retention day configurations. • You can have a Redundant Archiver for and a Standby Archiver at the same time. One shall be set to record redundant and the other set to only record on failover. • Independent Retention Policies It shall be possible to configure different retention periods for the Redundant and Standby Archivers. This allows organizations to optimize storage usage based on operational or compliance needs. Recording Data Consolidation & Backfill • The system shall support the consolidation and backfill of video recording data from a Standby Recording or Redundant Recording to the Primary Recording Server once the primary server becomes active after a failure or downtime. VMS should support Cloud storage Recording Transfer Specification: The Video Management System (VMS) shall support the capability to manage and transfer recorded video data with the following features: • Ability to transfer video from one server to another within the same system. • Ability to transfer video from a One VMS system (federated server) to another Same VMS server. • Ability to transfer video from a camera's SD card storage to a designated serve It shall be possible to program video transfers either on a recurrent schedule, or to trigger them manually or upon connection. It shall be possible to filter the video of interest for a transfer. The video of interest shall be defined with the following filters: • All archives when the camera was offline. • Alarms. • Playback request from the edge. • Video analytics events. • Motion events. • Bookmarks. • Input triggers. • Time range. It shall be possible to define the length of video before and after the event used as a filter to determine the video of interest. The VMS shall offer an interface for displaying all video archive transfer requests. This interface shall display all the current, requested and scheduled video transfer requests. It shall be possible to edit, trigger, and cancel video archive transfers from this interface. The VMS shall offer an interface for querying past video transfers and their outcome.			

	VMS Media Streaming controls A. It shall be possible to limit the number of concurrent live and playback video redirections for each Redirector Agent in order to better control the bandwidth across multiple sites. B. It shall be possible to limit the bandwidth consumed by live and playback video from the CSA to better control the bandwidth across multiple sites. The SSM shall be able to prioritize video streaming to the CSA based on user level. C. The VMS shall support a dedicated Media Gateway role to stream video to any third-party system in RTSP format, ensuring enhanced cybersecurity by isolating the core recording infrastructure. Threat Level • The VMS shall support configurable Threat Levels to dynamically modify system behavior in response to critical events • Threat Levels shall be activated and deactivated by operators with appropriate user privileges • Threat Levels shall be applicable either to specific areas or across the entire system • Upon activation, Threat Levels shall trigger predefined actions, including but not limited to: • Start recording on selected cameras • Block camera access/view • Override camera recording quality settings • Send live video feeds to specified users • Trigger Alarms • Send email notifications to designated users • Display visual notifications across all operator Clients • Change the UI color scheme of all client workstations to draw operator attention • Add bookmarks to ongoing live video feeds • Enable video protection to prevent footage deletion during retention period • Enforce user-level restrictions, including automatic logout of users below a defined privilege level Video Protection • The VMS shall support a Video Protection feature that allows specific video recordings to be marked as protected. • Protected video shall not be deleted automatically, even after the configured retention period has expired. • Protected video shall remain available until manually reviewed and deleted by an authorized user with the appropriate privileges. • The protected video footage shall remain searchable, viewable, and exportable as per standard permissions. • The VMS shall provide detailed statistics on video files, distinguishing between protected and unprotected recordings. Client User Security and Audit Features:			

	Four-Eye Principle (Dual Authorization): The Video Management System (VMS) shall support the Four-Eye Principle, also known as Dual Authorization, to strengthen operational security and accountability. This feature ensures that critical system operations cannot be executed by a single individual and must be authorized by, authorized users. The VMS shall enforce the Four-Eye Principle for the following operations: • Video Export: Any attempt by an operator to export recorded video data shall require logon authentication using the username and password of an authorized supervisor. • Report Export: Any attempt by an operator to export Report shall require logon authentication using the username and password of an authorized supervisor. Watermarking • The VMS user client shall support overlaying the following information on the video display interface: • Username of the currently logged-in operator • Camera Name as configured in the system • Workstation Name from which the session is active • The watermark information shall be visible in real-time on both live and playback views within the VMS client. • The watermark shall be dynamic and update automatically based on the active user session and camera stream. • The watermark shall be non-intrusive and appear semi-transparently over the video frame. • System administrators shall have the ability to configure the position (e.g., top-left, bottom-right) and font size of the watermark. • The watermark shall not be removable or modifiable by standard user roles. Visual tracking: • The Monitoring UI shall provide a Track Target functionality that enables the operator to manually follow a moving subject across cameras with a single click. • The Monitoring UI shall provide a "Enable Visual Tracking" widget button that enables the operator to manually follow a moving subject across cameras with a single click. • Upon clicking the button, the system shall automatically suggest or switch to the next best camera view based on the subject's location. • The system shall allow the operator to switch from one camera view to an adjacent camera within the same display tile, eliminating the need to open multiple views. • The Monitoring UI shall support semi-transparent overlays or shapes that represent adjacent camera views. • The visual tracking and camera-switching capabilities shall be supported in both live view and recorded playback modes			

	• Quick Search The Video Management System (VMS) must support an intelligent "Quick Search" capability to enable operators to efficiently locate specific moments within recorded video footage without manual scrubbing. Quick Access Tile: The system shall provide a dedicated "Quick Search" tile within the user interface to streamline access to this functionality. Area-Based Search without Drawing Tool: Operators shall be able to initiate a quick search by simply zooming into the region of interest on the video tile—no need to manually draw a bounding box. Video Thumbnail Timeline: Upon initiating Quick Search, the system shall display a scrollable timeline populated with video thumbnails representing activity changes in the selected area. Visual Time Navigation: Users shall be able to visually scroll through these thumbnails to quickly identify the exact moment when an item appeared, moved, or was removed. Software Upgrade • The Video Management System (VMS) shall include an integrated update management feature called the Update • Service. This service shall meet the following requirements: • The system shall automatically check for software updates on internet and provide facility to download package for following • Core VMS components such as Recording Servers and Management Servers. • New camera device packs and firmware packages (provided there is a trusted network between the camera OEM and the VMS). • The system shall provide real-time notifications to system administrators whenever updates or new versions are available. • The VMS Update Service shall support a dedicated Upgrade Server, which can be deployed in the network's DMZ zone with internet access, allowing isolation of the core VMS system from direct external connectivity. Dashboard • The VMS shall support the ability to create custom dashboards and shall be available off self • Operators shall be allowed to view dashboards if they are granted the appropriate privilege. Modification to the dashboards should also be allowed to users granted the appropriate privilege • Dashboards in the system shall be a task. A user shall have access to a specific dashboard task if they have the appropriate privilege • Dashboards shall be saved either in a private folder			

	or a public folder. Private shall be only accessible to that user and public shall be available for all users • A dashboard shall consist of a canvas with various widgets displayed on the canvas. All widgets should offer the ability to specify location and size to the widget, a title to the widget, a background color to the widget, and the ability to refresh periodically the content of the widget • Dashboard widget types shall be: • Image: provides the ability to display an image (JPG, PNG, GIF, BMP) on a dashboard. • Text: provides the ability to display a text on a dashboard. The text style shall be configurable, so font, size, color, and alignment can be specified by the user. • Tile: provides the ability to display any entity of the USP inside of a tile. • Web page: provides the ability to display a URL on a dashboard. • Reports: provides the ability to display the results of any saved reports in the system. The results shall be displayed either by showing the total number of results in the report, a set of top results from the report, or a visual graph from the data returned by the report • Entity Count: provides the ability to display the total number of a specific entity type in the VMS. • Map: Provides the ability to display and interact with maps on a dashboard • There shall be possible to make rule to push dashboard to certain user on any Event Default dashboard (Health Dashboard) : • Status Display Capabilities the Health Monitor shall be capable of displaying the following: • Role Status • Management Server status • Recording Server status • Client Connection Details • Number of active viewing clients • Number of active configuration clients • Number of active mobile clients • Recording Server Metrics • Current CPU and memory load (in percentage) • Recording data receive rate • Recording write rate • Total number of connected cameras • Number of cameras with recording enabled • Estimated recording duration remaining (based on current storage consumption and capacity) • Availability Metrics: The system shall provide availability statistics, including: • Camera availability percentage • Management Server availability • Role-based availability (with individual uptime percentages) • System uptime with Mean Time Between Failures (MTBF) & Mean Time To Recovery (MTTR) • Health Event Monitoring and Alerts: The system shall monitor and generate health-related events with			

	severity classification. Events shall include but not be limited to: • Camera recording failures • Video transmission loss • High CPU usage on servers • RTP packet loss Session Initiation Protocol (SIP) Communication Management The Video Management System (VMS) shall support Session Initiation Protocol (SIP) Communication Management (CM) to enable integration with voice-enabled edge devices. • The following capabilities shall be supported: SIP Integration ; • The VMS shall support SIP Communication Management for the integration of IP-based devices such as: • IP horn speakers • Video door stations • Intercom units • Emergency call stations Operator Call Handling via VMS Monitoring UI : The VMS shall provide a Monitoring User Interface (UI) that allows operators to initiate and receive SIP-based audio and video calls directly within the interface. Operators shall be able to: • Initiate and receive calls from SIP-enabled edge devices such as intercoms, emergency stations, and door stations. • Communicate with other VMS operators via SIP through the Monitoring UI, enabling operator-to-operator calls across different VMS clients. SIP Integration – Recording and Alarm Handling • The VMS shall support the recording of SIP-based audio/video communications, including operator-to-operator and operator-to-device interactions. • The VMS shall allow SIP devices to be logically linked with standard IP cameras. When a SIP call is received by a VMS client, the associated IP camera video stream shall be displayed alongside the SIP call, enabling the operator to view live video in context with the communication. Event-to-Action Support for Public Address (PA) Systems • The VMS shall support event-to-action configurations to trigger Public Announcement (PA) systems. • When an event is generated by a standard IP camera (e.g., motion detection, intrusion, or analytics-based alert), the system shall be able to automatically trigger a predefined public announcement through the integrated PA system or IP horn speakers. VMS Event/Action Management			

	• The VMS shall support the configuration and management of events for video and ALPR. A user shall be able to add, delete, or modify an action tied to an event if he has the appropriate privileges. • The VMS shall receive all incoming events from VMS and shall take the appropriate actions based on user-defined event/action relationships. • The VMS shall receive and log the following events: 1. System-wide events 2. Application events (clients and servers) 3. camera 4. Unit events 5. Alarm events 6. Health Monitoring events • The VMS shall allow the creation of custom events. • The VMS shall have the capability to execute an action in response to an access control, video, and ALPR event. The USP shall support the following list of actions, without being limited to: 1. Add bookmark 2. Block and unblock video 3. Display an entity in the CSA 4. Email a report 5. Email a snapshot 6. Export report 7. Go home 8. Go to preset 9. Override recording quality 10. Play a sound 11. Reboot unit 12. Run a macro 13. Run a pattern 14. Send a message 15. Send an email 16. Set threat level 17. Start/Stop applying video protection 18. Start/Stop recording 19. Start/Stop transfer 20. Trigger alarm 21. Trigger output 22. Trigger incident 23. Set interface background color • The VMS shall allow a schedule to be associated with an action. The action shall be executed only if it is an appropriate action for the current time period. Incident Reports • Incident reports shall allow the security operator to create reports on incidents that occurred during a shift. • The operator shall be able to create standalone incident reports or incident reports tied to alarms. • The operator shall be able to link multiple video sequences to an incident, access them in an incident report, and change the date or time of the sequences later on. • It shall be possible to create a list of Incident categories, tag a category to an incident, and filter the search			

	with the category as a parameter. • The incident reporting module shall support the custom widget to enable users to input text and other relevant data to documenting incident details. • Incident reports shall allow entities, events, and alarms to be added to support at the report's conclusions General Client Software Requirements The Client Software Applications (CSA) shall provide the user interface for VMS configuration and monitoring over any network and be accessible locally or from a remote connection. The CSA shall consist of the Configuration UI for system configuration and the Monitoring UI for monitoring. The CSA shall be Windows-based and provide an easy-to-use graphical user interface (UI A. All applications shall provide an authentication mechanism, which verifies the validity of the user. As such, the administrator (who has all rights and privileges) can define specific access rights and privileges for each user in the system. B. Logging on to a VMS server shall be done either through locally stored VMS user accounts and passwords or using the operator's Windows credentials when Active Directory integration is enabled C. When integrated with Microsoft's Active Directory, the CSA and USP shall authenticate users using their Windows credentials. As a result, the USP will benefit from Active Directory password authentication and strong security features. D. Configuration UI and Monitoring UI Home Page and Tasks 1. The Configuration UI and Monitoring UI shall be task oriented. 2. A task shall be user interface design patterns whose goal is to simplify the user interface by grouping related features from different systems, such as video in the same display window. Features shall be grouped together in a task based on their shared ability to help the user perform a specific task. 3. Tasks shall be accessible via the Home Page of either the Configuration or the Surveillance Client Software application. 4. Newly created tasks shall be accessible via the Configuration UI or the Monitoring UI taskbar. 5. Similar tasks shall be grouped into the following categories: a. Operation:. b. Investigation: c. Maintenance: 6. An operator shall be able to launch a specific task only if they have the appropriate privileges. 7. The Home Page content shall be customizable through the use of privileges to hide tasks that an operator should not have access to and through a list of favorite and			

	recently used tasks. In addition, editing a USP XML file to add new tasks on the fly shall also be possible. The Contractor shall provide up to 5 number of simultaneous Clients 1. Configuration User Interface (UI) 1. The Configuration UI shall allow the administrator or users with appropriate privileges to change video configuration. 2. The Configuration UI shall provide the ability to change video quality, bandwidth, and frame rate parameters on a per camera (stream) basis for both live and recorded video. 3. The Configuration UI shall provide the ability to change video quality by a selection of predefined video quality template. 4. The Configuration UI shall provide the ability to configure brightness, contrast, and hue settings for each camera on the same DVS. 5. The Configuration UI shall provide the capability to enable audio recording on DVS units that support audio. 6. The Configuration UI shall provide the ability to change the audio parameters, serial port and I/O configuration of individual DVS units. 7. The Configuration UI shall provide the capability to rename all DVS units based on system topology and to add descriptive information to each DVS. 8. The Configuration UI shall provide the ability to set recording schedules and modes for each individual camera. The recording mode can be: a. Continuous b. On motion and Manual c. Manual only d. Disabled 9. The Configuration UI shall support the creation of schedules to which any of the following functional aspects can be attached: a. Video quality (for each video stream per camera) b. Recording (for each camera) c. Motion detection (for each detection zone per camera) d. Brightness, Contrast, and Hue (for each camera) e. Camera sequence execution 10. The Configuration UI shall support the creation of unlimited recording schedules and the assigning of any camera to any schedule. 11. The Configuration UI shall detect and warn user of any conflict within assigned schedules. 12. The Configuration UI shall provide the capability to set a PTZ protocol to a specific DVS serial port and shall allow mixing domes of various manufacturers within a system. 13. User shall have the ability to configure a return to home function after a predefined time of inactivity for PTZ cameras. This period of inactivity time shall be configurable from 1 to 7200 seconds.			

	A. Monitoring UI Home Page and Tasks: 1. Similar tasks shall be grouped into the following categories: a. Operation: b. Investigation: Video bookmark/motion/archive reports. c. Maintenance: configuration reports, troubleshooters, audit trails, and more B. Dynamically Adaptive UI, Controls section, and Widgets C. Each task within the Monitoring UI shall consist of one or more of the following items: 1. Event list. 2. Logical tree: Doors, cameras, zones, ALPR units, and elevators shall be grouped under Areas in a hierarchical fashion. 3. Entities list of all entities being tracked. 4. Display tiles with various patterns (1 x 1, 2 x 2, and more). 5. Display tile menu with various commands related to cameras, doors, PTZ, and tile controls. 6. Controls section with widgets. D. The Monitoring UI shall support multiple event lists and display tile patterns, including: 1. Event/alarm list layout only 2. Display tile layout only 3. Display tile and alarm/event list combination 4. ALPR map and alarm/event list combination E. User workspace customization 1. The user shall have full control over the user workspace through a variety of user-selectable customization options. Administrators shall also be able to limit what users and operators can modify in their workspace through privileges. 2. Once customized, the user shall be able to save his or her workspace. 3. The user workspace shall be accessible by a specific user from any client application on the network. 4. Display tile patterns shall be customizable. 5. Event or alarm lists shall span anywhere from a portion of the screen up to the entire screen and shall be resizable by the user. The length of event or alarm lists shall be user-defined. Scroll bars shall enable the user to navigate through lengthy lists of events and alarms. 6. The Monitoring UI shall support multiple display tile patterns (for example one display tile (1x1 matrix), 16 tiles (8x8 matrix), and multiple additional variations). 7. The Monitoring UI shall support as many monitors as the PC video adapters and Windows Operating System are capable of accepting. 8. Additional customization options include show/hide window panes, show/hide menus/toolbars, show/hide overlaid information on video, resize different window panes, and choice of tile display pattern on a per task basis. F. The Monitoring UI shall provide an interface to			

	support the following tasks and activities video: 1. Monitoring the events from a live security system 2. Generating reports, including custom reports. 3. Monitoring and acknowledging alarms. 4. Creating and editing incidents and generating incident reports. 5. Displaying dynamic graphical maps and floor plans as well as executing actions from dynamic graphical maps and floor plans. 6. Management and execution of hot actions and macros. G. The Monitoring UI shall be able to monitor the activity of the following entities in real-time: areas, ALPR entities, doors, elevators, cameras, cardholders, cardholder groups, zones (input points), and more. H. The Monitoring UI shall include advanced video capabilities, including: 1. Advanced live video viewing functionality. 2. Advanced archive playing and video playback functionality. 3. Monitoring and management of video system events and alarms. 4. Intercom or duplex audio. 5. Generation of video reports. 6. Control of PTZ cameras. 7. Creating and monitoring archive transfer requests. 8. Display metadata overlaid on live or playback video. I. The Monitoring UI shall leverage the Graphical Processing Unit (GPU) for video decoding. 1. The following GPU technologies shall be supported: a. NVidia CUDA b. Intel Quick Sync 2. The Monitoring UI shall have the ability to decode video through the optimal simultaneous use of the GPU and Computer Processing Units (CPU). J. The live video viewing capabilities of the Monitoring UI shall include: 1. The ability to display all cameras attached to the USP and all cameras attached to federated systems. 2. Support for live video monitoring on each and every display tile within a task in the user's workspace. 3. The VMS shall support uninterrupted video streaming. The CSA shall keep existing video connections active in the event that an VMS Server (except Archiver) becomes unavailable. 4. The ability to drag and drop a camera into a display tile for live viewing. 5. The ability to drag and drop a camera into a display tile for live viewing on an analog monitor connected to an IP hardware decoder (converting an IP encoded stream into an analog video signal). 6. The ability to drag and drop a camera from a map into a display tile for live viewing. 7. Support for digital zoom on live camera video streams. 8. The ability for audio communication with video			

	units with audio input and output. 9. The ability to control pan-tilt-zoom, iris, focus, and presets. 10. The ability to bookmark important events for later retrieval on any archiving camera and to uniquely name each bookmark in order to facilitate future searches. 11. The ability to start/stop recording on any camera in the system that is configured to allow manual recording by clicking on a single button. 12. The ability to activate or de-activate viewing of all system events as they occur. 13. The ability to switch to instant replay of the video for any archiving camera with the simple click of button. 14. The ability to take snapshots of live video and be able to save or print the snapshots. 15. The ability to view the same camera multiple times in different tiles. K. The video playback (archive playing) capabilities of the Monitoring UI shall include: 1. Support for audio and video playback for any time span. 2. Support for video playback on each and every display tile. 3. The ability to instantly replay the video for any archiving camera with the simple click of a button. 4. The ability to select between instant synch of all video streams in playback mode, allowing operators to view events from multiple angles or across several camera fields, or non-synchronous playback. 5. The ability to simultaneously view the same camera in multiple tiles at different time intervals. 6. The ability to control playback with: a. Pause b. Lock Speed c. Forward and Reverse Playback at: 1x, 2x, 4x, 6x, 8x, 10x, 20x, 40x, 100x d. Forward and Reverse Playback frame by frame e. Slow Forward and Reverse Playback at: 1/8x, 1/4x, 1/3x, 1/2x f. Loop playback between two time markers 7. The ability to display a single timeline or one timeline for each selected video stream, which would allow the operator to navigate through the video sequence by simply clicking on any point in the timeline. 8. The ability to display the level of motion at any point on a timeline. 9. The ability to clearly display bookmarked events on the timeline(s). 10. The ability to query archived video using various search criteria, including, but not limited to, time, date, camera, and area. 11. The tool necessary for searching video and associated audio based on user-defined events or motion parameters. 12. The ability to define an area of the video field in which to search for motion as well as define the amount of			

	motion that will trigger search results. The Monitoring UI shall then retrieve all archived video streams that contain motion that meets the search parameters. There shall be a graphical timeline on which the time of each search hit shall be indicated. 13. The ability to browse through a list of all bookmarks created on the system and select any bookmarked event for viewing. 14. The ability to add bookmarks to previously archived video for easier searching and retrieval. 15. Support for digital zoom on playback video streams. 16. Still image export to PNG, JPEG, GIF, and BMP format with Date and Time stamp, and Camera Name on the image (snapshot). 17. Tools for exporting video and a self-contained video player on various media such as USB keys or CD/DVD-ROM. This video player shall be easy to use without training and shall still support reviewing video metadata, such as bookmark, or navigating the video with functions like panoramic camera view dewarping. 18. Tools for exporting video sequences in standard video formats, such as ASF or MP4. 19. The ability to encrypt exported video files. 20. The ability for an operator to load previously exported video files from their computer or network. 21. The ability for queries to be saved upon closing the CSA and reappear when the application is reopened. 22. The ability to dynamically block, on demand, video stream dynamically to lower-level users to prevent access, for a specific time, to live and recorded video. 23. A tool building and exporting a set of videos into a single container. This tool shall allow the operator to build sequences of video to create a storyboard and allow the export of synchronous cameras. 24. The ability to store the video export and still image export at a pre-defined storage location. 25. An interface with the ability to list, search, and manipulate previously generated video exports. 26. The ability to export sequences of video in open standards including ASF and MP4. L. Entity Monitoring: 1. The VMS shall permit the user to select multiple entities to monitor from the Monitoring UI by adding the entities one by one to the tracking list. 2. The Monitoring UI shall provide the option to filter which events shall be displayed in the display tile layout and/or event list layout. 3. It shall be possible to lock a Monitoring UI display tile so that it only tracks the activity of a specific entity (e.g., specific door or camera). 4. The user shall be permitted to start or pause the viewing of events within each display tile. M. Display Tile Packing and Unpacking: 1. The Monitoring UI shall support single-click unpacking all cameras 2. The packing and unpacking of entities shall allow			

	operators to quickly obtain additional information and camera views of a specific entity. 3. Packing will return the display to the original tile pattern. 2. Smartphone and Tablet App General Requirements A. The VMS shall support mobile apps for various off-the-shelf devices. The mobile apps shall communicate with the Mobile Server of the USP over any Wi-Fi or cellular network connection. B. Mobile apps shall communicate with the VMS via a Mobile Server Role (MSR). All communication between the mobile apps and MSR shall be based on standard TCP/IP protocol and shall use the TLS encryption with digital certificates to secure the communication channel. C. Supported device manufacturers shall include 1. Apple devices running iOS 2. Android devices D. It shall be possible to download the mobile apps from the Central application store (Apple iTunes App Store, Google Play). E. It shall be possible to push configuration to the mobile devices through a Mobile Device Management solution such as VMWare Workspace One or Microsoft Intune 1. Video Capabilities a. Ability to view live and recorded video from the cameras of the USP. A maximum of four cameras shall be displayed. b. Ability to view video in native format (H.264). c. Ability to display live and recorded video side-by-side for a specific camera. d. Ability to perform digital zoom on cameras. e. Ability to perform actions on cameras such as add a bookmark, control a PTZ, control the iris/focus function, save a snapshot, start/stop recording. f. Ability to view camera layouts. g. Ability to view camera sequences. h. Ability to run a camera events report. i. Ability to change the video quality on the cameras displayed on the mobile app. j. Ability to use the camera of the smartphone and stream a live video feed to a video recorder in the system. 2. Alarm Management a. Ability to receive push notifications to notify mobile operators that an alarm was received. b. Ability to view all active alarms assigned to the mobile operator. c. Ability to perform action on an alarm such as acknowledge, investigate, or alternate-acknowledge an active alarm. F. It shall be possible to send a live or playback video sequence from the client UI in control room to a mobile operator. G. It shall be possible to view mobile operators who enabled location tracking on a map in the Control room			

<table>
<tr><td></td><td>client UO. The location of the mobile operator should be updated in real time
3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.</td><td></td><td></td><td></td></tr>
<tr><td>5.</td><td>SITC of VMS software Camera perpetual (Lifetime) License for 300 Cameras with 3 years onsite comprehensive warranty and maintenance support.
3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.</td><td>300</td><td>Nos</td><td></td></tr>
<tr><td>6.</td><td>SITC of VMS software, Desktop/Mobile Client perpetual (Lifetime) license with built-in Camera function, Mobile camera should be live view & Recording on VMS in the Main control room with 3 years onsite comprehensive warranty and maintenance support.
<table><tr><td>Application Type</td><td>Unified mobile client software for VMS</td></tr><tr><td>Supported Functions</td><td>Remote monitoring and operation of security system components including video surveillance, access control, ALPR, intrusion monitoring, and event management</td></tr><tr><td>Live Monitoring</td><td>Must support live video streaming from connected cameras and able to live stream of Mobile Camera at control room.</td></tr><tr><td>Playback</td><td>Must support playback of recorded footage</td></tr><tr><td>Mobile Camera Streaming</td><td>Must support live and recorded mobile camera streaming at the control room</td></tr><tr><td>PTZ Control</td><td>Must support remote PTZ (Pan-Tilt-Zoom) camera control</td></tr><tr><td>Evidence Tools</td><td>Must support snapshots and bookmarks for event documentation</td></tr><tr><td>Access Control Integration</td><td>Must allow remote door monitoring/control and display user credentials and access events</td></tr><tr><td>Alarm & Incident Handling</td><td>Must support real-time response to alarms, incidents, and event notifications</td></tr><tr><td>Communication Security</td><td>Communication shall be encrypted and secure, using industry standard protocols</td></tr><tr><td>User Authorization</td><td>Role-based permission management aligned with server configuration</td></tr><tr><td>Notifications</td><td>Push notifications for alarms, motion detection, and critical alerts</td></tr><tr><td>Interface Features</td><td>Interactive map or layout-based navigation for viewing and controlling</td></tr></table></td><td>10</td><td>Nos</td><td></td></tr>
</table>

	security devices Device Compatibility: Must support smartphone and tablet devices OS Support: Android and iOS operating system support required System Compatibility: Must be compatible with the deployed VMS server version as per OEM guidelines Operational Use Case: Must enable remote field-level operational capability, improved situational awareness, and faster decision-making Availability: Shall operate without requiring physical presence at control room or command centre ● 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
7.	**SITC of the ANPR Software perpetual (Lifetime) license with 3 years onsite comprehensive warranty and maintenance support.** ● Smart Shutter Technology supported to ensure high accuracy, especially with fast-moving vehicles. ● Integrated IR illuminator supported to ensure high accuracy and reliable performance in all lighting conditions, including complete darkness. ● Detect & read license plates automatically ● Alert for Blacklisted vehicles Entry/Exit ● The system can process vehicles with speed up to 80 km/hr or more ● Dedicated design provides stability & reliability 24/7 ● Day/night performance for traffic monitoring ● Headlight filter for brilliant night image ● Vehicle Entry-Exit monitoring (VEEM) system:- Vehicle entry-exit monitoring software can be installed in a standard server to keep track of the vehicles that enter and leave gated premises. ● Restricting Entry-Exit of Vehicle: Given a list of vehicles, the system can alert the user if any unregistered vehicle is detected at the entry/exit gate. This will help you to bar entry or exit of that particular vehicle without prior permission from the authorized person. ● Restricting overstaying of vehicles ● History of Vehicles :Given a license plate number of a vehicle, the system tells you how many times, and when, the vehicle has entered/left the premises in a given time duration. ● Triple Streaming ● Triple streams give much more flexibility to users by allowing different data stream to be send simultaneously, and each for independent purposes:	4	Nos	

	● Main stream: full resolution ● Sub stream: low resolution ● 3rd stream: flexible choice (full, low or dynamic resolution)Display videos in different resolutions and qualities simultaneously with different Encryption. ● Low Bitrate ● Smart ROI (Feature of Video Compression) ● With these feature users can select his ROI (Region of Interest) Based on that camera can retain the image quality of the ROI & can decrease a non-ROI's image quality to save maximum bandwidth and storage, The ROI marked regions will be smartly transmitted & recorded with more details and better image quality under the same bit rate conditions ● Image Stabilization: Removes image jitter that is caused by vibrations in the building. This stabilization greatly reduces the amount of hard disk space required to store images. Depending upon the amount of shake, DIS can reduce storage requirements by as much as half even in cameras with no apparent image jitter ● ANPR software should be integrated with VMS for reporting and other configurations. ● 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
8.	**SITC of Video Management server with Failover for Up to 1000 cameras with edge video Analytics applications Processing functions with 3 years onsite comprehensive warranty and maintenance support.** 1. **Form Factor:** 1U/2U Rack-mountable Server 2. **Processor** - 1 x Intel Xeon 4310 OR Higher, 12 cores / 24 threads or higher, 2.1 GHz, 18– 24 MB cache, expandable to 2 CPUs 3. **Operating System -** Microsoft Windows Server 2022 Standard or higher 4. **Memory -** 64 GB DDR4 or higher ECC Registered RDIMM (4x16 GB or higher), 2933–3200 MT/s, scalable to 8 TB with 32 DIMM slots 5. **Storage Controller (RAID)** Enterprise RAID Controller (12 Gb/s SAS/SATA, RAID 0/1/5/6/10/50/60, 2 GB+ FBWC) 6. **Primary Storage Bays -** 4 x LFF (3.5") Hot-Plug Drive Bays, SAS/SATA/NL-SAS support 7. **Configured Drives (SSDs) -** 2 x 480 GB Enterprise SSDs (Boot / OS drives, RAID 1 mirror) 8. **Networking -** Embedded 2x1GbE, 2x10GbE; expansion for 25/40 GbE NICs via PCIe / OCP 3.0	**02**	**Nos**	

	9. **Power Supply -** Dual Redundant Hot-Plug Power Supplies, 500W/800W Platinum, N+1 redundancy 10. **Management -** Remote management: with HTML5 console & Root of Trust 11. **Cooling** Redundant hot-swappable fans with N+1 configuration, intelligent power efficiency 12. **Expansion Slots -** Up to 8 PCIe Gen4 slots for NICs, GPUs, or additional RAID/storage controllers 13. **Security -** UEFI Secure Boot, TPM 2.0, Intrusion Detection, Silicon Root of Trust 14. Optimized for database hosting, cluster redundancy, and system failover 15. Wireless Keyboard and optical mouse 16. Automated VMS failover/recording server failover support for up to 1000 cameras, without loss of recordings during primary server failure, as per VMS design. 17. Supply all required SFP/SFP+/QSFP transceiver modules, passive/active DAC or AOC cables, fiber patch cords, Cat6/Cat6A patch cords, FC optics/HBAs (if applicable), power cords and rack mounting accessories required for end-to-end connectivity between servers, storage and switch. 18. Supply 2 additional disks of the same capacity to keep as spares for replacement in case of disk failure. 19. Compliance and Certifications: ISO 27001, RoHS, CE, FCC, ISO 9001 & ISO 14001 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.			
9.	**SITC of Dual Controller Video Storage Server Appliance for 30 days of recording with a minimum of 480TB raw storage expandable up to 2 Petabytes of storage with 3 years onsite comprehensive warranty and maintenance support.** ● Form Factor 2U Rack-mountable Server ● Processor Minimum 12-core, 2.1 GHz or higher, scalable architecture ● Processor Support System must support processor expansion (Minimum 2 CPU sockets) ● System Memory Minimum 32GB DDR4 ECC Registered RAM, expandable with additional slots ● Memory Expandability System must support multiple DIMM slots up to enterprise capacity threshold ● Storage (Internal SSD) Minimum 2× 480 GB SATA SSD installed, RAID support required ● RAID Support RAID 0, 1, 5, 6, 10, or controller-based supported RAID architecture ● Network Interfaces Minimum Dual-Port 10 Gbps	**01**	**Nos**	

	Ethernet Adapter ● Expansion Slots PCIe Gen support required for networking/storage scalability ● Power Supply Minimum 800 W Redundant Hot-Swappable Power Supply ● Cooling Redundant system cooling fans ● System Compatibility Must support virtualization, clustering, and storage SAN connectivity ● Accessories Mandatory heat-sink and power components included ● System Type Enterprise-class iSCSI SAN Storage System ● Host Connectivity Minimum 8× 10GbE iSCSI Host Ports or higher ● Base Chassis Drive Slots Minimum 12× Large Form-Factor (LFF) drive bays or higher ● Installed HDD Capacity Minimum 20× SAS 7.2K LFF HDDs (≥20TB each) ● Raw Storage Capacity Minimum 480TB or higher raw storage (before RAID) ● RAID Level Support RAID 0, 1, 5, 6, 10, 50 ● Caching Architecture Minimum dedicated controller cache (enterprise tier) ● Controller Dual-Controller Active-Active Architecture required ● Tiering Support Automated real-time tiering support (SSD / HDD hybrid capability) ● Thin Provisioning Required ● Snapshot Built-in snapshot capability required ● Replication Remote replication support required ● Management Interface Web GUI, CLI, REST API support ● Network Support IPv4 & IPv6 compatible ● Redundancy Hot-swappable controllers, drives, fans, power supplies ● Enclosure Format 2U Rack-mountable SAS-based Expansion Enclosure ● Drive Bay Support Minimum 12× LFF drive bays ● Connectivity SAS-based enclosure interface compatible with main SAN storage ● Redundancy Hot-plug drive support and power redundancy ● SFP Transceivers Minimum 4× 10Gb SR iSCSI-supported SFP modules ● DAC Cables Minimum 2× Passive DAC cable, length ≥3 meters ● Compliance and Certifications: ISO 27001, RoHS, CE, FCC, ISO 9001 & ISO 14001 ● Supply all required SFP/SFP+/QSFP transceiver modules, passive/active DAC or AOC cables, fiber patch cords, Cat6/Cat6A patch cords, FC optics/HBAs (if applicable), power cords and rack mounting accessories required for end-to-end connectivity between servers, storage and switch.			

	● Supply 1 additional disks of the same capacity to keep as spares for replacement in case of disk failure. ● 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
10.	**SITC of PTZ Camera Control Joystick Keyboard with 3 years onsite comprehensive warranty and maintenance support.** ● Support network control with independent IP address. ● Support ONVIF ● 5-inch industrial LCD screen, resolution 800*480 or higher, image decoding, real-time monitoring. ● Support 4D joystick control ptz function ● Support IE web setting ● Support custom function buttons, add shortcut function (customized) ● Support Knob for zoom and control speed ● Support POE ● Full control of Pan / Tilt / Zoom (PTZ) — smooth, continuous pan/tilt/zoom control, with variable speed adjustment. ● Control of Iris / Focus / Zoom / Exposure / White Balance / Gain (as required) — i.e. full camera parameter control (not just PTZ). ● Support for Preset positions, Preset recall, Preset programming, ● Ability to address and control multiple cameras (e.g. up to 255 cameras or higher from a single controller Support for quick camera select / call-up keys (for switching between cameras quickly). ● Support for common PTZ camera control protocols — e.g. VISCA, PELCO-D / PELCO-P, or ONVIF / IP-based protocols (depending on CCTV system). ● Support for multiple physical interfaces: e.g. RS-232, RS-422, RS-485, and / or RJ-45 (Ethernet / IP / PoE). ● Scalability & Addressing ● Capability to control a large number of PTZ cameras (e.g. up to 255). ● Ability to store and recall a large number of presets . Power / Physical / Environmental ● Power supply: acceptable: DC 12 V, or PoE. ● Operating temperature range: e.g. –10 °C to +50 °C or better ● Construction: robust/durable housing (metal or alloy), suitable for professional/media/security environment. ● Display / UI: LCD screen for status / camera details / menu navigation. ● Must be compatible with the CCTV/ surveillance cameras to be deployed (i.e. cameras supporting supported protocols: VISCA, Pelco-D/P, ONVIF,	**01**	**Nos**	

	etc.). ● Should support both serial-controlled cameras and IP-controlled cameras ● 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
11.	**SITC of Workstation for Client Monitoring & Video wall control - i9, 64GB, 2X480 GB SSD, 1xNvidia RTX 4070 Graphics card with 3 years onsite comprehensive warranty and maintenance support** Form Factor Rack Workstation chassis (enterprise-grade, vendor certified) Processor - Intel Xeon W-series or Xeon Scalable (12–16 cores, ECC memory support, higher stability for enterprise workloads) Memory - 64 GB DDR4/DDR5 (depending on platform), ECC optional, dual/triple channel supported Storage (Boot / System) - 2 x 480 GB Enterprise SSDs in RAID-1 (OS & Security Center), + optional NVMe SSD for cache/scratch Graphics - 2 x NVIDIA RTX 4070 GPUs (for multi-monitor setup, video decoding/AI workloads) Operating System - Microsoft Windows 11 Professional (64-bit) or Higher Networking - 1 x 1 GbE NIC (standard), expansion option for 10 GbE NIC Power Supply - Dual / Redundant 1000W Platinum-rated PSUs (for reliability in high GPU load) Cooling - High-performance cooling (liquid or advanced air cooling for CPU, optimized airflow for dual GPUs) Motherboard & Expansion - Workstation / Server class board, enough PCIe slots for 2 GPUs, SSDs, NIC; good thermal design; sufficient VRM capacity Security - TPM 2.0, Secure Boot, Chassis Intrusion Detection High-performance workstation role: multi-monitor client viewing, video decoding, AI tasks, smooth client operation in large camera environments, Total Security Antivirus, MS Office Latest Version USB Keyboard and Mouse of same OEM. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.	**02**	**Nos**	
12.	**SITC of Workstation for Client Monitoring - i7, 32GB, 480 GB SSD, with Nvidia 6GB Graphics card with original Windows 11 Pro, including 21" or higher monitor with 3 years onsite comprehensive warranty and maintenance support.** Form Factor Rack Workstation chassis (enterprise-grade, vendor	**04**	**Nos**	

	certified) Processor - Intel Xeon W-series or Xeon Scalable (12-16 cores, ECC memory support, higher stability for enterprise workloads) Memory - 32 GB DDR4/DDR5 (depending on platform), ECC optional, dual/triple channel supported Storage (Boot / System) - 1 x 480 GB Enterprise SSDs + optional NVMe SSD for cache/scratch Graphics - 2 x NVIDIA RTX 4070 GPUs (for multi-monitor setup, video decoding/AI workloads) Operating System - Microsoft Windows 11 Professional (64-bit) or Higher Networking - 1 x 1 GbE NIC (standard), expansion option for 10 GbE NIC Power Supply - Dual / Redundant 1000W Platinum-rated PSUs (for reliability in high GPU load) Cooling - High-performance cooling (liquid or advanced air cooling for CPU, optimized airflow for dual GPUs) Motherboard & Expansion - Workstation / Server class board, enough PCIe slots for 2 GPUs, SSDs, NIC; good thermal design; sufficient VRM capacity Security - TPM 2.0, Secure Boot, Chassis Intrusion Detection High-performance workstation role: multi-monitor client viewing, video decoding, AI tasks, smooth client operation in large camera environments, Total Security Antivirus, MS Office Latest Version, 21" or Higher LED Monitor Screen, USB Keyboard and Mouse of same OEM. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.			
13.	**SITC of Laptop - i7, 8GB, 480 GB SSD, with inbuilt 2GB Graphics with original Windows 11 Pro with 3 years onsite comprehensive warranty and maintenance support.** Processor Intel Core i7 RAM Minimum 8 GB DDR4 or Higher Storage Minimum 480 GB SSD Graphics Integrated or Dedicated Graphics with Minimum 2 GB VRAM Display Minimum 14" or Above, Full HD (1920×1080) Operating System Pre-installed Genuine/Original Windows 11 Pro with License, End point Antivirus , MS Office License Connectivity: Wi-Fi, Bluetooth, USB Ports, HDMI or Type-C Laptop Bag (compatible and good quality) 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.	**1**	**Nos**	

14.	**SITC of LED Monitor, 55" 4K, 24x7 Rated for Control Room with 3 years onsite comprehensive warranty and maintenance support.** ● Size: 55" ● Resolution: 3840*2160 (4K UHD) or higher ● Brightness 500 Nits or higher ● Panel Technology IPS/ VA ● Viewing Angle (H/V) 178° ● Display Colors 16.7M(True Display) or higher ● Audio Built in Speaker (10W + 10W) ● Input HDMI 2.0 x 3, USB 2.0x1 ● Output Line Level Audio Out-3.5MM Jack/ Bluetooth Audio Connectivity ● Duty Cycle 24/7 Hrs. ● Special Features UHD Signage with Built-in Software, Smart Share, Web browser, Button lock, Plug Play, HDR Pro/10/Plus ● External Control RJ45 ● Mounting Wall Mount, all required accessories has to be supply for installation ● Certificates BIS, UL ● Compliance ROHS ● Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug & Play (Initial Setting) ● Operating Temperature: 0℃~ 40℃ or higher ● Compatibility: CCTV/NVR/DVR/DESKTOP/LAPTOP ● Support for multiple video formats ● Strong build/commercial range design ● Anti-Glare Coating: Required ● With all required cables, connectors and other required accessories ● 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.	**4**	**Nos**	
15.	**SITC of LED Monitor, 24" Full HD for Control Room with 3 years onsite comprehensive warranty and maintenance support.** ● Display Size: 24 inches (diagonal) or higher ● Display Type: LED-backlit, flat panel ● Panel Technology: IPS/VA/TFT LED (IPS preferred) ● Aspect Ratio: 16:9 supported ● Native Resolution: Minimum 1920 × 1080 (Full HD) or higher ● Brightness: Minimum 250–300 cd/m² ● Contrast Ratio: Minimum 1000:1 or higher ● Viewing Angle: 178° (H) × 178° (V) ● Refresh Rate: Minimum 60 Hz ● Response Time: ≤ 8 ms (5ms or lower	02	Nos	

	preferred) ● Color Support: 16.7 million colors ● Anti-Glare Coating: Required ● Inbuilt Speakers, Audio In/Out Inputs & Connectivity ● HDMI ports: Minimum 1 (preferably 2) ● VGA port: 1 (mandatory for legacy DVR support) ● Audio In/Out: 1 (optional) ● USB port: Optional (for service/firmware/media support) ● Supported Video Formats: HDMI, VGA ● Compatibility: Must support CCTV DVR/NVR output formats Electrical & Operating Requirements ● Power Supply: 100–240V AC, 50/60 Hz ● Power Consumption: ≤ 30–40 W (normal operation) ● Operating Temperature: 0°C to 40°C ● Humidity: 10%–80% (non-condensing) ● Energy Efficiency: Low power LED backlight Build & Durability ● Duty Cycle: 24×7 continuous operation (mandatory) ● Build Quality: Commercial-grade preferred ● Bezel: Narrow bezel design for multi-screen CCTV setups ● Screen Protection: Anti-burn-in technology preferred Mounting & Installation ● Mount Compatibility: As per site requirement ● Wall Mount Bracket: Should be supplied ● Cable Management: HDMI/VGA cables to be provided 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
16.	**SITC of Network Switch, L2 Managed, 24 Port with 2SFP Port with 3 years onsite comprehensive warranty and maintenance support.** Switch Type: Fully Managed Layer-2 Gigabit Ethernet Switch Switching Capacity: Minimum 56 Gbps or higher Forwarding Rate: Minimum 41.6 Mpps or higher	01	Nos	

	Flash / Memory: Minimum 32MB Flash and 128MB RAM or more Ports: Minimum 24 × 10/100/1000 Mbps RJ-45 ports + 4 × 1Gb SFP Uplink Ports Console Port: 1 × RJ-45 Console Port Auto-Negotiation: Yes (10/100/1000 Mbps) VLAN Support: IEEE 802.1Q VLAN, Minimum 4K VLAN **entries** Layer-2 Features: STP / RSTP / MSTP, Link Aggregation (LACP), Port Mirroring, Jumbo Frame support (9K Bytes) Security Features: MAC Binding / Port Security, DHCP Snooping, ARP Inspection, IP Source Guard IGMP Support: IGMP Snooping v1/v2/v3, MLD v1/v2 QoS: QoS based on Port, 802.1p, DSCP, Minimum 8 hardware queues Management: Web GUI, CLI, Telnet, SSH, SNMP v1/v2c/v3, RMON, IPv4/IPv6 management Certifications: TEC / RoHS 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
17.	**SITC of 10G SFP Module should same make of the existing network L3 Switch with 3 years onsite comprehensive warranty and maintenance support.** Form Factor: SFP+ (Small Form-Factor Pluggable Plus), hot-swappable Data Rate: **10 Gbps (minimum)** Compliance Standards: IEEE 802.3ae / SFF-8431 / SFF-8432 compliant Connector Type: **LC Duplex connector** Wavelength Options (Based on Model Type): **- 850nm (Multimode SR)- 1310nm (Single Mode LR)** Supported Distance: **- 300m (OM3 Fiber) – SR Type- 10 Km (OS2 Fiber) – LR Type** Laser Type: - SR: **VCSEL Laser**- LR: **DFB Laser** DOM Support: Digital Optical Monitoring (DDM/DOM) supported (Temperature, TX, RX, Voltage monitoring) Operating Temperature: 0°C to +70°C (Commercial Grade)	04	Nos	

	Fiber Type Supported: **- MMF (OM2 / OM3 / OM4) for SR- SMF (OS1 / OS2) for LR** Power Budget: - SR: Minimum 6dB- LR: Minimum 10dB Protocol Compatibility: Fully compatible with Ethernet 10GBASE-SR/LR Make: The make should be the same as per network switch. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
18.	**SITC of L3 Network Switch, Managed, 24-Port with 3 years onsite comprehensive warranty and maintenance support.** Switch Type: Enterprise-Grade Managed Layer-3 Gigabit Ethernet Switch Switching Capacity: Minimum **56 Gbps or more** Forwarding Rate: Minimum 41 **Mpps** or More Ports: Minimum **24 × 10/100/1000 Mbps RJ-45 Access Ports** Uplink Ports: Minimum **4 × Gigabit SFP+ Uplink Ports** CPU & Memory: Embedded Multicore CPU with Minimum **2 GB DRAM** and **4 GB Flash** Layer-3 Features: Supports basic Layer-3 routing (static routes, RIP, OSPF, EIGRP etc.) as per Catalyst series capability VLAN Support: IEEE **802.1Q VLAN**, **1,000 VLANs** or more supported Stacking: Hardware Stacking supported with Minimum **4 switches per stack** Quality of Service (QoS): 802.1p CoS, DSCP marking, Traffic shaping, Priority Scheduling, 8 queues per port Multicast Support: IGMP Snooping v1/v2/v3, MLD, PIM-SM / PIM-DM equivalent Management: CLI management support Certifications: RoHS 03 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.	01	Nos	

19.	**SITC of Network Switch, Managed, 8 Port, PoE, indutrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.** Switch should have 8x10/100/1000M ports with 2x1Gig SFP ports Switch should have IP40 grade protection Switch should support Din-Rail Mount Switch should have a Fanless Design MTBF of the switch should be higher than 800000 hours Switch should support min 8K MAC address support Switch should have a backplane capacity of at least 20 Gbps Forwarding rate of the switch should be 14.88 Mpps Switch should support line speed of 1Gbps Switch should support power input of DC48~55V Power Budget of the switch should be 240W Conforms to IEEE802.3af/at standard, maximum 30W PoE power of single port Power consumption of the switch should be less than 20Watt when no load Power consumption of the switch when full load should not be above 260W Switch should support dual DC power inputs of 48~55V Operating Temperature of the switch should be within -40~85 deg Centigrades Humidity of the switch should be within 5~95% Switch should support ERPS with less than 50 seconds recovery time Supports forming a self-healing ring network between any two ports, and supports multiple Independent self-healing rings Provides a data packet loss protection mechanism for quickly recovering from failures Self-healing time of each node is less than 5 milliseconds Web interface Telnet interface Console port (RJ-45/RS232) Should support CLI Should support SNMP v1/v2/v3 Should support RMON 1, 2, 3, 9 Switch should support STP / RSTP / MSTP Switch should support L2/L3/L4-based ACL Switch should support IP+ MAC+ port binding Switch supports Suppression of broadcast multicast and unknown unicast packet Switch supports Command line hierarchical protection Console upgrade Web Browser upgrade Switch should TEC, ROHS Certified. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.	04		
20.	**SITC of Network Switch, Managed, 4 Port, PoE,**	40		

	industrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support. Switch should have 4x10/100/1000M ports with 2x1Gig SFP ports Switch should have IP40 grade protection Switch should support Din Rail Mount Switch should have a Fanless Design MTBF of the switch should be higher than 100000 hours Support Total Power Consumption Control Support PoE ON/OFF; Switch should have PoE+ support on all 4 ports with Power budget of 120W Switch should support min 8K MAC address support Switch should have a backplane capacity of at least 12 Gbps Switch should have Line Speed 1Gb/s Switch should support DC power supply (48~57VDC) Switch should support Power Consumption to be <15W Switch should support Dual power input Storage Temp- - 40 ~ 85 degree Celsius Operating Temp - 40 ~ 75 degree Celsius Humidity 5~95%, Non Condensing Should support highly reliable industrial Ethernet ring network technology through ERPS ring/ RSTP Self-healing <50ms Should support Web interface Should support Internet Explorer Should support Telenet interface Should support RS232 Console Should support CLI Should support SNMP V1/V2C/V3 Should support RMON Switch Should support STP Protocol Switch Should Support Web Browser upgrade Switch Should support MSTP protocol Switch Should support IPv6 & IPv4. Switch Should support LLDP Switch Should support SNMP V1/V2C/V3 Switch Should support RS232 Console upgrade Switch Should support Web Browser upgrade Switch should TEC ,ROHS Certified 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
21.	**SITC of RF Wireless backhaul Radio with 3 years onsite comprehensive warranty and maintenance support.** Product Type — Outdoor Point-to-Point (PTP) Radio System Frequency Band — 5 GHz Unlicensed Band (5.1 GHz to 5.9 GHz depending on regional	12		

		regulations)			
	Antenna Type	Integrated High-Gain Antenna			
	Antenna Gain	Minimum 23 dBi or better			
	Radio Chains (MIMO)	2x2 MIMO or better			
	Modulation Technology	Dynamic Adaptive Modulation up to 256 QAM			
	Channel Bandwidth Support	20 / 40 / 80 MHz			
	Maximum Aggregate Throughput	Up to 1.4 Gbps (aggregate) or better			
	Spectral Efficiency	Minimum 8.5 bps/Hz or better			
	Duplexing Method	TDD (Time Division Duplex)			
	Frequency Channel Support	Multiple Independent Channels per Radio (Dual Carrier Support)			
	Encryption & Security	WPA2, AES 128-bit or better			
	QoS & Traffic Optimization	VLAN support (802.1Q), Layer 2/3 Bridge Support			
	Management Interface	Web GUI, SNMP v2/v3, Remote Management			
	Powering Option	PoE (Minimum 56V Passive PoE)			
	Power Consumption	≤ 30 Watts			
	Ethernet Port	At least 1× Gigabit Ethernet Port (100/1000Base-T)			
	Mounting Type	Pole and Wall Mounting Hardware Included			
	Environmental Rating	IP67 Industrial Outdoor Rated			
	Operating Temperature	–40°C to +60°C or better			
	Wind Survivability	Minimum 200 km/h or better			
	Lightning & Surge Protection	IEC 61000-4-5 or equivalent Surge Protection			
	Synchronization Support	GPS Sync / TDD Sync capability			
	Certification Compliance	FCC, CE, RoHS, ETSI or equivalent regional approvals			
	Provision of proper **Earthing** for all required equipment as part of the installation and commissioning work must be ensured.				
	Perpetual License for On-Premises Software Controller to				

	manage and configure all RF Radio Devices. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
22.	**SITC of RF Wireless Base Station Radio with 3 years onsite comprehensive warranty and maintenance support.** Device Type: Outdoor wireless Base Station / Access Point (AP) for PTMP backhaul Radio Technology: OFDM-based 2×2 MIMO or better Frequency Band: Approx. 5.1–5.98 GHz as per national approvals Channel Widths: 20 / 40 / 80 MHz Channel Spacing: Configurable in 5 MHz steps Subscriber Capacity: Minimum 64 Subscriber Modules or better Peak Sector Throughput: At least 600 Mbps aggregate or better Adaptive Modulation: Up to 256-QAM 5/6 or better GPS Synchronization: Mandatory support for TDD sync / GPS sync to enable frequency reuse Receive Sensitivity: ≥ –89 dBm (MCS0), ≥ –59 dBm (MCS9) Transmit Power: Adjustable up to +29 dBm (as per regulatory limits) External Antenna Support: Must support 2×2 sector antennas (90°, 120°), horn antennas, or omni antennas Antenna Ports: Dual RF ports (RP-SMA or equivalent) GPS Antenna: 1× GPS antenna port with external puck antenna support Ethernet Interface: 10/100/1000 Base-T Ethernet Network Protocols: IPv4/IPv6, SNMP, HTTPS, SSH, IGMP snooping, STP VLAN & QoS: 802.1Q VLAN tagging, 802.1p priority, QoS for CCTV video Weatherproof Rating: Minimum IP67/IP68 outdoor enclosure Power Input: Passive PoE, approx. 14–30V DC Operating Temperature: –30°C to +60°C Provision of proper **Earthing** for all required equipment as part of the installation and commissioning work must be ensured. Perpetual License for On-Premises Software Controller to manage and configure all RF Radio Devices. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The	07	Nos	

	warranty should reflect in the support web site of the OEM.			
23.	**SITC of RF Wireless Base Station Sector antenna with 3 years onsite comprehensive warranty and maintenance support.** Antenna Type: Outdoor Sector Antenna, compatible RF Radio Frequency Range: 4910–5970 MHz MIMO Support: 2×2 MIMO or better Gain: 17–22 dBi (depending on beamwidth) or better Beamwidth Options: 60° / 90° / 120° (OEM to specify exact gain) Polarization: ±45° Slant Dual Polarization VSWR: ≤ 1.5:1 Connector Type: N-Female or compatible connector for RF Radio Cross-Polar Isolation: ≥ 20 dB or better Front-to-Back Ratio: ≥ 25 dB or better Environmental Rating: IP65 or better (Outdoor Hardened) Mounting: Universal pole mount hardware included Provision of proper **Earthing** for all required equipment as part of the installation and commissioning work must be ensured. Perpetual License for On-Premises Software Controller to manage and configure all RF Radio Devices. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.	07	Nos	
24.	**SITC of RF Wireless CPE Radio with Integrated Antenna on outdoor poles with 3 years onsite comprehensive warranty and maintenance support.** Device Type: Outdoor wireless RF radio suitable for point-to-point (PTP) and point-to-multipoint (PMP) data backhaul for CCTV networks Operating Frequency Band: Radio shall operate in the 5 GHz licensed/unlicensed band as per national regulations Supported Channel Widths: Minimum support for 20 MHz, 40 MHz, and 80 MHz channels Channel Spacing: Configurable channel spacing in steps of 5 MHz or better Radio Technology: OFDM-based radio supporting 2×2 MIMO or better	58	Nos	

	Data Throughput	Minimum aggregate throughput of 600 Mbps or better			
	End-to-End Latency	Typical wireless latency shall not exceed 2–5 ms for smooth CCTV video transmission			
	Adaptive Modulation	Support for adaptive modulation up to 256-QAM or higher			
	Receive Sensitivity	High receive sensitivity suitable for long-range CCTV backhaul; minimum –85 dBm at lower MCS levels			
	Automatic Retransmission	Support for ARQ and advanced error correction for stable video links			
	Transmit Power	Adjustable transmit power up to +25 dBm or as per regulatory limits			
	Integrated Antenna	Integrated directional panel antenna with minimum 16 dBi gain or better			
	Beamwidth (Azimuth)	Minimum 6-20 degrees azimuth beamwidth			
	Beamwidth (Elevation)	Minimum 6–30 degrees elevation beamwidth			
	Surge Protection	Integrated surge protection of minimum 1 Joule rating			
	Ethernet Interface	10/100/1000 Mbps Ethernet port with compatibility for PoE input			
	Supported Protocols	IPv4/IPv6, TCP, UDP, ICMP, SNMP, NTP, STP, IGMP, SSH or equivalent			
	Network Management	Support for HTTPS/SSH-based management; must integrate with centralized NMS			
	VLAN & QoS	Support for IEEE 802.1Q VLANs, priority tagging, and multi-level QoS for video traffic			
	Weatherproofing	Outdoor enclosure with minimum IP55 ingress protection rating			
	Operating Temperature	–30°C to +60°C or better			
	Wind Resistance	Able to withstand wind speeds of minimum 180 km/h or higher			
	Weight	Not exceeding 2.5 kg, including mounting hardware			
	Dimensions	Compact form factor suitable for pole and outdoor installations			
	Mounting Support	Compatible with pole diameters ranging from 25 mm to 60 mm			
	Power Consumption	Maximum power consumption not exceeding 15W			
	Power Input	Passive PoE input with supported voltage range of 14–30V DC or equivalent			
	Data Security	Support for AES-based encryption (128-bit or higher)			
	Certifications	Should comply with applicable national/international wireless, safety, and EMC standards			
	Included Accessories	Radio unit, PoE injector, mounting bracket, and all required installation			

	accessories Provision of proper **Earthing** for all required equipment as part of the installation and commissioning work must be ensured. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
25.	**SITC of LFP battery-based DC 90VA outdoor UPS or higher for Field Devices, with a minimum of 1 hour. Battery Backup for connected devices with 3 years onsite comprehensive warranty and maintenance support.** UPS Type: Outdoor-rated DC UPS with LFP (Lithium Iron Phosphate) battery Installation: One UPS per pole Output Voltage: Dual Output: (a) DC 48V (12 + 12W) for PoE Switch & Camera (b) DC 26V (12W) for RF Radio Voltage Regulation: Output stabilized with regulation better than **±1% at full load** Charging System: Separate CC-CV Lithium-based charger; Input: 220V AC Backup Time: Minimum **1.5 Hours** based on defined load Charging Time: 4–5 hours under load / approx. 3 hours without load Switching Technology: Electronic automatic switchover with **zero-transfer time** (no reboot on power failure) Solar Input Provision: Additional input available to support solar panel via external controller (future use) Battery Type: LFP (Lithium Iron Phosphate) – maintenance-free Enclosure: Metal enclosure with separate charger section Connectors: Input & output connectors included Operating Temperature: 0°C to 55°C Over-Temperature Protection: Auto shut-off if temperature exceeds **60°C** Rating: DC 90VA 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.	58	Nos.	
26.	**SITC of Pole Mount Outdoor Junction Box with Din-Rail Arrangement with 3 years onsite comprehensive warranty and maintenance support.–** Outdoor Pole Rack with IP 55 and 4U Rack with Rigid	58	Nos.	

	frame that can be fixed to the pole,90CFM, 230V AC Fan - 2 Nos, front door,6 Socket PDU 5Amp - 1 No, Front Door with Filter, Louver & Unique key Lock, Self-adhesive thermal foam from inside ,Hood For Air Inlet at front side,1U Cantilever Tray, 1U Cable Manager (1No) 250mmDepth,Gasket (As per IP55 Standard),rack should be Light Grey -RAL 7035-powder coated, Pole Mounting Brackets at rear side- 2 Nos should be provided with Rack with all accessories and mounting fixture. 3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
27.	**SITC of Cat 6 Armoured STP LAN Cable including Conduit and required fixtures with 3 years onsite comprehensive warranty and maintenance support.** Conductor — 4-pair, 23 AWG, Solid Bare Copper Insulation Material — High-Density Polyethylene (HDPE) per pair Inner Separator / Sheath — PE cross-separator + inner sheath (PVC / LSZH) Outer Jacket / Sheath — Black PE sheath — UV-resistant, weather-proof Armour / Protection — GI-wire armour or rugged double-sheath for mechanical protection (outdoor/armoured type) Category / Standard Compliance — Category-6, per ANSI/TIA-568-C.2 & ISO/IEC 11801 standards Bandwidth / Performance — Up to 250 MHz — supports up to Gigabit Ethernet (1000Base-T) Impedance — 100 Ω nominal Operating Environment — Outdoor/external installation, UV-resistant sheath Application Suitability — Outdoor LAN cabling — for CCTV, data, networking, surveillance installations in outdoor/exposed environments Mechanical Protection — Armoured / rugged sheath to protect against mechanical stress, rodents, weather, pulling force, etc. Cable Type — STP Armoured / outdoor-grade CAT-6 cable (suitable for external / exposed runs)	900	Mtr.	
28.	**Supply and fixing of 6 Meter Pole with foundation with 3 years onsite comprehensive warranty and maintenance support.** Pole Type — Octagonal Hot-Dip Galvanized CCTV Pole	58	Nos.	

	Height	**6 Meter (Above Ground Level)**		
	Material	Mild Steel (MS)/GI, ISI Standard grade		
	Galvanization	**Hot Dip Galvanized minimum 80–90 micron**		
	Base Plate	Minimum **250 × 250 × 16 mm** (Laser cut/precision welded)		
	Pole Shaft Thickness	3–4 mm (as per standard design)		
	Welding	Seamless continuous welding as per IS standards		
	Arm	**1 Meter GI Camera Extension Arm**, suitable for CCTV load		
	Climbing Provision	Built-in **ladder/steps** for maintenance access		
	Wind Speed Compliance	Designed for minimum **180 km/h wind resistance**		
	Mounting Hardware	Stainless steel fasteners, earthing provision, cable entry port		
	Finish	Anti-corrosion protective paint/galvanizing coating		
	Accessories Included	Cable routing entry slot, top flange, mounting bracket		
	3 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware/software support. The warranty should reflect in the support web site of the OEM.			
29.	**Works of Testing, Configuration, Firmware Update, IP Re-Allocation & Re-commissioning of the Existing Camera and Network Switches in the proposed system, including Works of OTDR Testing & rectification of any faults, including fiber splicing & pigtail as required in the Existing Optical Fiber cable backbone of the CUR Network & Works of Penta scanning & rectification of any faults in the existing Cat-6 cable LAN network, including repunching of I/O Modules & Patch Panels of the CUR network for existing cctv system.** The bidder shall design and implement a dedicated, secure CCTV network for the University by integrating the existing CCTV infrastructure with the proposed wireless CCTV surveillance system, and by logically and physically segregating CCTV traffic from the existing LAN/data network wherever required. The bidder shall assess the current network architecture and reconfigure switching, VLANs, IP addressing and routing such that all CCTV cameras (existing and new), VMS servers and storage operate on a dedicated CCTV network segment, isolated from the University's general user LAN except at defined integration points (e.g., Central Control Room (CCR)/viewing clients, Security Operations Center (SOC), monitoring consoles). The scope shall include seamless integration of all existing	01	Job	

	IP CCTV cameras, NVRs (if retained), and network switches into the new centralized VMS and CCTV network, ensuring that existing cameras are migrated, re-addressed, tested and brought under unified monitoring and management without loss of functionality. Works of Testing, Configuration, Firmware Update, IP Re-Allocation and Re-commissioning of the existing cameras and network switches into the proposed CCTV system are included in the bidder's scope. This also includes: • OTDR testing and rectification of any faults in the existing optical fiber backbone of the CUR network, including fiber splicing, pigtail termination, etc. and patching as required. • Penta-scanning / certification and rectification of any faults in the existing Cat-6 LAN cabling related to the CCTV system, including re-punching of I/O modules and patch panels of the CUR network where CCTV is connected. All required reconfiguration, migration and segregation activities shall be carried out by the bidder without disruption to the University's academic/administrative LAN services, in coordination with the University's ICT team. Approximately 200 existing CCTV cameras shall be integrated into the proposed VMS and dedicated CCTV network. The bidder shall carry out all additional works, configurations and adjustments, whether explicitly mentioned in this document or not, that are necessary to make the entire CCTV surveillance system (including new wireless links and existing cameras) fully functional, stable and centrally manageable from the Control Room at single window. All CCTV cameras (existing and new) integrated with the VMS shall be securely accessible through the VMS & mobile client application over the Internet on authorized mobile devices. Remote access shall use secure communication (HTTPS/VPN or equivalent), strong authentication (user ID/password and, where supported, multi-factor authentication) and role-based access control to prevent unauthorized viewing or tampering of live or recorded video.			
30.	**Works of Unified Video Surveillance System and CCTV Control room Re-Commissioning, Software configuration, Customization & user training Services with Integration of the Existing Active & Passive ITC LAN System with the proposed Solution** The bidder shall design, implement and re-commission a unified IP-based Video Surveillance System and CCTV Control Room for the University, integrating the proposed wireless CCTV solution with the existing active and passive ITC/LAN infrastructure, while ensuring logical/physical segregation of CCTV traffic from the general data network.	01	Job	

	The bidder shall create a dedicated, secure CCTV network segment (VLANs / separate switching as applicable) for all CCTV components, with controlled integration points to the University LAN for authorized viewing, administration and recording services. As part of this scope, the bidder shall assess the existing CCTV setup and Control Room, dismantle or re-organize obsolete components where required, and re-commission the CCTV Control Room with the new VMS, video wall/monitors, servers, storage, network switches and associated furniture, cabling and power arrangements on a turnkey basis. All existing and newly supplied equipment shall be integrated into a single, centrally managed VMS environment with appropriate user roles, recording policies, alerts, and health monitoring. The scope includes complete integration of approximately 200 existing and 100+ new CCTV cameras and associated switches & other devices into the proposed unified VMS and CCTV network. The bidder shall carry out testing, configuration, firmware update, IP Re-allocation and re-commissioning of all existing cameras and relevant network switches & other devices in the proposed system, ensuring that all cameras are reachable, viewable and recordable in the VMS with appropriate naming, grouping and retention settings. All additional works required to onboard existing cameras (including replacement of faulty PoE injectors/switch ports, minor accessories, and configuration changes) shall be treated as within the bidder's scope The bidder shall perform OTDR testing of the existing optical fiber backbone segments used for CCTV, identify and rectify any faults, and carry out fiber splicing, pigtail termination and patching in LIUs/FDMS as required to achieve a stable backbone for the unified system. The bidder shall also perform Penta scanning/certification and rectification of faults in the existing Cat-6 cabling used for CCTV, including re-punching of I/O modules and patch panels, replacement of damaged cords/IOs, and ensuring compliance with structured cabling standards. The unified system shall be configured to provide secure access to live and recorded video from the VMS on authorized client PCs and mobile devices over the Internet, using secure communication (HTTPS/VPN or equivalent), strong authentication and role-based access control in line with University cyber-security policies. The bidder shall integrate the VMS and CCTV components with existing time/NTP, AD or identity services and Network Management/System Monitoring tools where specified by the University ICT team. The bidder shall provide comprehensive software configuration, customization and user training services, including creation of camera layouts, views, alarm rules, user/groups, reports and retention policies as per University requirements. Structured training shall be provided for control room operators, IT/network staff and security personnel covering day to day operation, basic troubleshooting, incident retrieval/export procedures and			

	cyber security best practices; relevant manuals, SOPs and as built documentation shall be handed over upon completion. Any civil and electrical works required for setting up, modification, finishing or beautification of the CCTV Control Room (including, but not limited to, minor partitioning, painting, flooring/false ceiling adjustments, conducting, additional electrical points, lighting, sockets, switches and associated wiring) to make the Control Room fully functional and aesthetically presentable shall be entirely in the scope of the bidder, at no additional cost to the University.			
31.	**Supply and laying of Electrical works with 3 years onsite comprehensive warranty and maintenance support including all stated work after completion of DLP, including spare parts, consumables, tools & takels, labour, machinery etc. complete as required on site, as per standard practice and directions of authority.** **31.1)** Supplying of 3 X 2.5 sq. mm PVC insulated and PVC sheathed / XLPE, copper conductor armored power cable of 1.1 KV grade	6000 (Tentative)	RMT	
	31.2) Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	60 (Tentative)	Nos.	
	31.3) Supplying and fixing 20 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole and neutral All works necessary to carry power from the source to the destination, including the provision and integration of UPS connections and laying of all required cables up to each CCTV connection point, shall be entirely within the scope of the bidder/supplier. The University will provide only the raw power tap point, and the bidder shall be responsible for all remaining work required making the entire CCTV system fully functional. Any faults arising during execution/maintenance/warranty and any repair work required to rectify such faults shall also fall under the scope of the bidder.	60 (Tentative)	Nos.	
32.	**Providing and carrying out Civil work including laying/ excavation/digging work with 3 years onsite comprehensive warranty and maintenance support including all stated work after completion of DLP, including spare parts, consumables, tools & takels, labour, machinery etc. complete as required on site, as per standard practice and directions of authority.** 32.1) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation and refilling the trench etc. as required.(3 X 2.5 sq. mm)	4500 (Tentative)	RMT	

	32.2) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on the existing poles/wall as required. (3 X 2.5 sq. mm)	1500 (Tentative)	RMT	
	32.3) Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required. The bidder must obtain a No Objection Certificate (NOC) and all necessary permissions from the University before carrying out any civil-related work. All relevant equipment, including machinery, tools, parts, and labor, shall be provided by the bidder. Proper route marking shall also be carried out by the bidder. Any faults arising during execution, along with any repair work required to rectify such faults, shall fall under the bidder's scope. After any excavation, it shall be mandatory for the bidder to restore the site to its original condition. Any damage caused to University property during the course of work shall be the sole responsibility of the bidder, and necessary recovery will be imposed by the University.	60 (Tentative)	Nos.	
33.	**Resident one engineer (Skilled) for 3 years onsite maintenance support** The deployed skilled engineer shall perform the following duties: 1. 24×7 CCTV monitoring 2. Regular observation of live feeds from all cameras. 3. Report suspicious activities, security violations, or malfunctioning equipment. 4. Assist in retrieving video footage and preparing reports as required by authorities. 5. Maintain daily logs, incident records, and handover/takeover notes. 6. Ensure system uptime, report alert notifications, and escalate issues to the IT/Security team. 7. Perform basic health checks of NVR/VMS/storage and alert on errors. 8. Coordinate with AMC/maintenance vendor for technical issues. 9. Maintain confidentiality of all recorded data and events. 10. Assist during audits, inspections, and evidence retrieval for law enforcement or internal committees. Qualification Requirements The manpower must meet the following minimum criteria: Diploma qualification/ B.tech/BCA/BSC or Graduate or equivalent Minimum 2 years of experience in CCTV control room operation Knowledge of Networking, CCTV systems, NVR/VMS operations, and video retrieval	36	Months	

	Basic computer proficiency (Windows, MS Office, Email) Experience in handling of mid or large scale RF based surveillance system Ability to write incident reports and maintain logs Good communication skills & disciplined conduct Responsibilities Ensure uninterrupted monitoring, maintenance and up keeping of entire CCTV Setup. Report all incidents immediately Maintain confidentiality and integrity Not leave the duty post without permission Comply with organizational security policies Coordinate with IT & Security teams during alert events			

(8)TENDER FORM

(Techno Financial UN priced Bid)

Tender No……..

To

The _____

_____

Dear Sir,

1. I/We hereby offer to supply the items as listed in the schedule to this tender hereto/portion thereof as you may specify in the acceptance of Tender at the price given in the said Schedule and agree to hold this offer open for a period of 180 days from the date of opening of the tender. I/we shall be bound by a communication of acceptance issued by you.
2. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
3. A crossed Bank Draft in favour of the Registrar, Central University of Rajasthan for Rs. ……. (Rupees……..only) as Earnest Money is enclosed. The Draft is drawn on …… Bank payable at Bandarsindri/Madanganj/Kishangarh.
4. The following have been added to form part of this tender.
   a) Details of items quoted for, as per instructions provided in the schedule of requirement.
   b) Schedule of requirements, quoting the make only duly signed and stamped (without indicating price)
   c) Copy of PAN.
   d) Copy of last audited balance sheet.
   e) Copy of Valid Central/State sales tax/GST registration certificate.
   f) Proof of manufacturing Unit.
   g) Statement of deviations from financial terms & conditions, if any.
   h) Manufacturer's Authorization Certificate on their letter pad.
   i) Technical Specifications Compliance statement along with original Brochure / literature.
   j) Any other enclosure. (Please give details)
5. We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.
6. Certified that the bidder is:
   a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor,

      OR

   b) A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

      OR

   c) A company and the person signing the document is the constituted attorney.

      (NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document).

7. We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.

Yours faithfully,

(Signature of bidder)

Dated this day of _____

Address…

……..

……..

Telephone:_____

FAX_____

E-mail_____

Seal of Bidder Organization

(9)Tender Form (Priced Bid) Part B

To
The _____
_____
_____

Ref: Tender No……, Dated

Sir,
Having examined the bidding documents and having submitted the techno Financial un-priced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of price.

We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.

The prices quoted are inclusive of all charges net F.O.R University. We enclose herewith the complete Financial Bid as required by you. This includes:

i. Price Schedule as per schedule of requirement.
ii. Statement of deviations from financial terms and conditions.

We agree to abide by our offer for a period of 180 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.

Certified that the bidder is:
A sole proprietorship firm and the person signing the bid document is the sole proprietor/ constituted attorney of sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney,

Or

A company and the person signing the bid document is the constituted attorney.
(NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document.)
We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of_____
Details of enclosures

Signature of Bidder Full
Address:
Fax No.
E-mail:

Seal of Bidder Organization

(10)Price Schedule (Annexure "B-1")

E.M.D._____

D.D. Details_____

Bank Name_____

Date_____

Format for Financial Bid
(To be submitted on the letterhead of the company / firm)

Ref. No. Dated:

Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Central Control Room with 3 Years Comprehensive On-site Maintenance Contract at Central University of Rajasthan

S. No	Item Description	Unit	Qty.	Price	Amount	Taxes	Total Price F.O.R. at Central University of Rajasthan All inclusive
1.	SITC of 5MP or Higher Outdoor Motorised lens Bullet Camera with mounting fixture on outdoor 6 Mtr poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	95				
2.	SITC of 5MP or Higher Outdoor Motorised lens Bullet ANPR Camera with mounting fixture on outdoor 6 Mtr poles, including 512GB Class-10 SD Card. (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4				
3.	SITC of 4MP or Higher Outdoor PTZ camera with mounting fixture 6 Mtr poles, including 512GB Class-10, SD Card (STQC certified Camera) with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4				
4.	SITC of Unified VMS Software solution with perpetual (Lifetime) licenses with Failover function, scalable up to a thousand cameras, including 5 client viewing licenses, with 3 years onsite comprehensive warranty and maintenance support.	Set	1				

5.	SITC of VMS software Camera perpetual (Lifetime) License for 300 Cameras with 3 years onsite comprehensive warranty and maintenance support.	Nos.	300				
6.	SITC of VMS software, Desktop/Mobile Client perpetual (Lifetime) license with built-in Camera function, Mobile camera should be live view & Recording on VMS in the Main control room with 3 years onsite comprehensive warranty and maintenance support.	Nos.	10				
7.	SITC of the ANPR Software perpetual (Lifetime) license with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4				
8.	SITC of Video Management server with Failover for Up to 1000 cameras with edge video Analytics applications Processing functions with 3 years onsite comprehensive warranty and maintenance support.	Nos.	2				
9.	SITC of Dual Controller Video Storage Server Appliance for 30 days of recording with a minimum of 480TB raw storage expandable up to 2 Petabytes of storage with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1				
10.	SITC of PTZ Camera Control joystick Keyboard with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1				
11.	SITC of Work station for Client Monitoring & Video wall control - i9, 64GB, 2X480 GB SSD, 1xNvidia RTX 4070 Graphics card with 3 years onsite comprehensive warranty and maintenance support	Nos.	2				
12.	SITC of Workstation for Client Monitoring - i7, 32GB, 480 GB SSD, with Nvidia 6GB Graphics card with original Windows 11 Pro, including 21" or higher monitor with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4				
13.	SITC of Laptop - i7, 8GB, 480 GB SSD, with inbuilt 2GB Graphics with original Windows 11 Pro with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1				
14.	SITC of LED Monitor, 55" 4K, 24x7 Rated for Control Room with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4				
15.	SITC of LED Monitor, 24" Full HD for Control Room with 3 years onsite comprehensive warranty and maintenance support.	Nos.	2				
16.	SITC of Network Switch, L2 Managed, 24 Port with 2SFP Port with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1				
17.	SITC of 10G SFP Module should same make of the existing network L3 Switch with 3 years	Nos.	4				

	onsite comprehensive warranty and maintenance support.						
18.	SITC of L3 Network Switch, Managed, 24-Port with 3 years onsite comprehensive warranty and maintenance support.	Nos.	1				
19.	SITC of Network Switch, Managed, 8 Port, PoE, indutrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.	Nos.	4				
20.	SITC of Network Switch, Managed, 4 Port, PoE, industrial Grade Outdoor with 3 years onsite comprehensive warranty and maintenance support.	Nos.	40				
21.	SITC of RF Wireless backhaul Radio with 3 years onsite comprehensive warranty and maintenance support.	Nos.	12				
22.	SITC of RF Wireless Base Station Radio with 3 years onsite comprehensive warranty and maintenance support.	Nos.	7				
23.	SITC of RF Wireless Base Station Sector antenna with 3 years onsite comprehensive warranty and maintenance support.	Nos.	7				
24.	SITC of RF Wireless CPE Radio with Integrated Antenna on outdoor poles with 3 years onsite comprehensive warranty and maintenance support.	Nos.	58				
25.	SITC of LFP battery-based DC 90VA outdoor UPS or higher for Field Devices, with a minimum of 1 hour. Battery Backup for connected devices with 3 years onsite comprehensive warranty and maintenance support.	Nos.	58				
26.	SITC of Pole Mount Outdoor Junction Box with Din-Rail Arrangement with 3 years onsite comprehensive warranty and maintenance support.	Nos.	58				
27.	SITC of Cat 6 Armoured STP LAN Cable including conduit and required fixtures with 3 years onsite comprehensive warranty and maintenance support.	Meter	900				
28.	Supply and fixing of 6 Meter Pole with foundation with 3 years onsite comprehensive warranty and maintenance support.	Nos.	58				
29.	Works of Testing, Configuration, Firmware Updation, IP Re-Allocation & re-commissioning of the Existing Camera and Network Switches in the proposed system, including Works of OTDR Testing & rectification of any faults, including fiber splicing & pigtail as required in the Existing Optical Fiber cable backbone of the CUR Network & Works of Penta scanning & rectification of any faults in the existing Cat-6 cable LAN network, including repunching of I/O Modules & Patch Panels of the CUR network for existing cctv system.	Job	1				

30.	Works of Unified Video Surveillance System and CCTV Control room Re-Commissioning, Software configuration, Customisation & user training Services with Integration of the Existing Active & Passive ITC LAN System with the proposed Solution	Job	1				
31.	Supply and laying of Electrical works with 3 years onsite comprehensive warranty and maintenance support including all stated work after completion of DLP, including spare parts, consumables, tools & takels, labour, machinery etc. complete as required on site, as per standard practice and directions of authority. 31.1) Supplying of 3 X 2.5 sq. mm PVC insulated and PVC sheathed / XLPE, copper conductor armored power cable of 1.1 KV grade	RMT	6000 (Tentative)				
	31.2) Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Nos.	60 (Tentative)				
	31.3) Supplying and fixing 20 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole and neutral.	Nos.	60 (Tentative)				
32.	Providing and carrying out Civil work including laying/ excavation/digging work with 3 years onsite comprehensive warranty and maintenance support including all stated work after completion of DLP, including spare parts, consumables, tools & takels, labour, machinery etc. complete as required on site, as per standard practice and directions of authority. 32.1) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation and refilling the trench etc as required.(3 X 2.5 sq. mm)	RMT	4500 (Tentative)				

	32.2) Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on the existing poles/wall as required. (3 X 2.5 sq. mm)	RMT	1500 (Tentative)				
	32.3) Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Nos.	60 (Tentative)				
33.	Resident one engineer (Skilled) for 3 years onsite maintenance support	Months	36				
	Grand Total (inclusive GST)						

Separate rate for Comprehensive onsite Maintenance (for 4th to 6th year, after expiring of 3 years warranty period).

S. No.	Details	Rate of CMC (For 4th year)	Rate of CMC (For 5th year)	Rate of CMC (For 6th year)

Separate rate for Annual Maintenance Contract (for 7th to 10th year, (i.e. after expiring of CMC period).

S. No.	Details	Rate of AMC (For 7th year)	Rate of AMC (For 8th year)	Rate of AMC (For 9th year)	Rate of AMC (For 10th year)

Note:

1. I/We have gone through the entire terms & conditions as stipulated in the tender enquiry document and confirm to accept and abide the same.
2. No other charges would be payable by the University.

Authorized signatory of the company with seal.

(11)FORMAT OF PERFORMANCE BANK GUARANTEE

This guarantee should be furnished by a Nationalized Bank / Scheduled Bank, authorized by RBI to issue a Bank Guarantee.
This bank guarantee should be furnished on stamp paper of Rs. 100/-
The stamp paper should have been purchased in the Name of the Bank executing the Guarantee.
In the case of foreign bidder the B.G may be furnished by an international reputed bank acceptable to the PURCHASER countersigned by any Nationalized / Scheduled Bank in India authorized by Reserve Bank of India.

WHEREAS M/s ……., having it's registered office at …… hereinafter called the Distributor in India for
……,herein after called "The supplier" for the supply of ……., in consideration of the Central University of Rajasthan, Department of ……, School of ……Central University of Rajasthan, , Kishangarh (hereinafter called "CURAJ") P.O. No. CURAJ /……Dated. Placed an order for the due fulfillment by the said supplier of the terms and conditions in the purchase order, on production of a Bank Guarantee for Rs…….. (Rupees……..
…….. Only). We …….. Bank,……(herein after referred to as "the Bank") at the request of supplier do hereby undertake to pay to the CURAJ an amount not exceeding to Rs……. (Rupees ……. only).

1. We……Bank do hereby undertake to pay CURAJ, the amounts due and payable under this guarantee without any demur, merely on a demand from CURAJ stating that the amount claimed is required to meet the recoveries due or likely to be due from the said supplier. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under the guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding to Rs…….(Rupees …….. only)

2. We undertake to pay to the CURAJ any money so demanded notwithstanding any dispute or disputes raised by the supplier in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid and discharge of our liability for payment there under and the Supplier shall have no claim against us for making such payment.

3. We the ……. Bank further agree that the guarantee herein contained shall remain in full force and affect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the CURAJ under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till Registrar on behalf of the CURAJ certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said ……and accordingly discharges this guarantee.

4. We, the ……. Bank further agreed that the CURAJ shall have the fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said Purchase Order or to extend the time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the CURAJ against the said supplier and to forbear or enforce any of the Terms and Conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance act or omission on the part of the CURAJ or any indulgence by the CURAJ to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

5. This guarantee will not be discharged due to change in the constitution of the bank or the supplier.

6. We, the ……Bank lastly undertakes not to revoke this guarantee except with the previous consent of the CURAJ in writing.

7. This guarantee shall be valid up to …… unless extended on demand by CURAJ. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs /- (Rupees …… only).

Notwithstanding anything contained herein

1. Our liability under this bank guarantee shall not exceed Rs…… /-(Rupees ……. Only)

2. Bank guarantee shall be valid up to ……..

3. We are liable to pay the guaranteed amount or part thereof under this bank guarantee only and only if you serve upon us a written claim or demand on or before ……..

Dated:

Signature & Seal of the Bank

.

(12)FORMAT FOR MANUFACTURER'S AUTHORIZATION LETTER TO AGENT

(On letter head)

Ref. No. Date:

To
The Registrar,
Central University of Rajasthan,
Bandarsindri, Distt. Ajmer,
Rajasthan – 305817

Sub. : **Tender for Supply, Installation, Testing and Commissioning of Wireless Outdoor CCTV Surveillance System and Unified CCTV Control Room with 3 years of Comprehensive On-site Maintenance Contract at Central University of Rajasthan.**

Dear Sir,

We, _____, who are established and reputed manufacturers of _____, having factory at_____, hereby authorize M/s._____(name & address of Indian distributor / agent) to bid, negotiate and conclude the order with you for the goods manufactured by us.

We shall remain responsible for the tender/ Agreement negotiated by M/s _____, jointly and severely.

An agency commission of _____ % included in the FOB price is payable to M/s _____. We hereby extend our full guarantee and warranty as per the terms and conditions of tender for the goods offered for supply against this invitation for bid by the above supplier.

1. _____
2. _____

(Specify in detail manufacturer's responsibilities)

The services to be rendered by M/s. _____are as under:

1) _____
2) _____

(Specify the services to be rendered by the distributor / agent)

In case duties of the Indian agent/distributor are changed or agent/ distributor is changed it shall be obligatory on us to automatically transfer all the duties and obligations to the new Indian Agent failing which we will ipso-facto become liable for all acts of commission or omission on the part of new Indian Agent/ distributor.

Yours faithfully,

[Name & Signature] for and on behalf of M/s. _____[Name of manufacturer]

(13)DECLARATION REGARDING BLACKLISTING / DEBARRING FOR TAKING PART IN TENDER.

I / We _____ Manufacture / Partner(s)/ Authorized Distributor /agent of M/S. _____ hereby declare that the firm/company namely M/s._____has not been blacklisted or debarred in the past by Union / State Government or organization from taking part in Government tenders in India.

Or

I / We _____ Manufacture / Partner(s)/ Authorized Distributor / agent of M/s. _____hereby declare that the Firm / company namely M/s._____was blacklisted or debarred by Union / State Government or any Organization from taking part in Government tenders for a period of _____ years w.e.f. _____ to _____. The period is over on _____and now the firm/company is entitled to take part in Government tenders.

In case the above information found false I / we are fully aware that the tender / contract will be rejected / cancelled by the Central University of Rajasthan, and EMD / SD shall be forfeited.

In addition to the above, Central University of Rajasthan, will not be responsible to pay the bills for any completed / partially completed work.

Signature with Seal

Name_____

Address _____

_____

Attested:

(Public Notary / Executive Magistrate)

(14) CERTIFICATE OF GUARANTEE/WARRANTY

I/We certify that the guarantee/warranty shall be for a period of 36 months (as applicable) starting from the date of satisfactory installation, commissioning and handing over of the equipment and of the works conducted therewith covered under the Supply order in working order. During the guarantee/warranty period, I/we shall provide free "after sale service" and the replacement of any part(s) of the equipment or rectification of defects of work of the equipment will be free of cost. The replacement of the parts shall be arranged by us, at our own cost and responsibility. We undertake that the above guarantee / warranty shall begin only from the date of satisfactory and faultless functioning of the equipment for 30 days at University premises. The benefit of change in dates of the guarantee / warranty period shall be in the interest of the user/your organization.

During the warranty period, we shall provide at least 02 preventive maintenance visits per year.

Uptime Guarantee: During the guarantee/warranty period, we will be responsible to maintain the equipment in good working conditions for a period 347 days (i.e. 95% uptime) in a block of 365 days.

- All complaints will be attended by us within 2 working days of receipt of the complaint in our office.
- In case there is delay of more than 2 days in attending to a complaint from our side then you can count the number of days in excess of the permissible response time in the downtime. The above said response time of 2 days for attending to a complaint by us will not be counted in the downtime.
- Penalty: We shall pay a penalty equivalent to 0.50% of the FOB value of the equipment for every week or part thereof delay in rectifying the defect.

Note: The right to accept the reason(s) for delay and consider reduction or waive off the penalty for the same shall be at the sole discretion of University.

We certify that the equipment being/quoted is the latest model and that spares for the equipment will be available for a period of at least 10 years and we also guarantee that we will keep the organization informed of any update of the equipment over a period of 10 years.

We guarantee that in case we fail to carry out the maintenance within the stipulated period, University reserves the right to get the maintenance work carried out at our risk, cost and responsibility after informing us. All the expenses including excess payment for repairs/maintenance shall be adjusted against the Performance Bank Guarantee. In case the expenses exceed the amount of Performance Bank Guarantee, the same shall be recoverable from us with/without interest in accordance with the circumstances.

We shall try to repair the equipment at University premises itself. However, the equipment will be taken to our site on our own expenses in case it is not possible to repair the same at University premises. We shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till the equipment is rehabilitated to the University after repair. Any loss of equipment or its accessories under its charge on account of theft, fire or any other reasons shall be at our sole risk and responsibility which will be compensated to University for such losses.

We undertake to perform calibration after every major repair/breakdown/taking the equipment for repair out of University premises.

In case of extended guarantee/Warranty, we undertake to carry out annual calibration of the equipment .

We guarantee that we will supply spare parts if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price.

We guarantee to the effect that before going out of production of spare parts, we will give adequate advance notice to you so that you may undertake to procure the balance of the life time requirements of spare parts.

We guarantee the entire unit against defects of manufacture, workmanship and poor quality of components.

Signature of Bidder

(Name)

Seal of Bidder Organization

(15) Technical specifications compliance Sheet

a. The technical compliance bid must be in this sheet only, otherwise is should be assumed that bidder is not able to offer technically desired product. Information provided elsewhere or in different form will not be considered.

b. All the columns of this sheet should be filled in compulsorily by the bidder, merely asking the office to refer catalogue or brochure will not be entertained.

c. The bidder shall assume full responsibility of the information provided in this sheet. Any false statement should render the breach of basic foundation of the tender.

Name of Equipment / Instrument: Compliance Check list/ Table

S. No.	Technical specification	Features available in equipment write (yes/No)	Any deviation from specification	Corresponding page no. and S. No./ Para no. of datasheet catalogue/ brochure in support of specification (As provided with technical Bid)
	Technical Specification as per Tender document			
1				
2				
3				
4				
5				
6				
7				

(16) Integrity Pact

INTEGRITY PACT

This INTEGRITY PACT is made and executed at……on this day of……20….

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through Registrar (insert name & designation of the officer) of Central University of Rajasthan, Bandarsindri, Kishangarh-305817, Ajmer. (hereinafter referred to as "The Buyer" which term or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the First Part;

AND

M/s …… A company incorporated under the Companies Act,……through its representative/authorized signatory (insert name & designation of the officer) vide resolution dated …… passed by the Board of Directors, having its office at …… (hereinafter referred to as "The Bidder/Contractor which term or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Second Part.

PREAMBLE

The Buyer intends to award under laid down organizational procedures, contract/s for..... The Buyer values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Buyer will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Buyer

(1.) The Buyer commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

a. No employee of the Buyer, personally or through family members, will in connection with tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

b. The Buyer will during the tender process treat all Bidder(s) with equity and reason. The Buyer will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder{s} confidential /additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

c. The Buyer will exclude from the process all known prejudiced persons.

(2.) If the Buyer obtains information on the conduct of any of its employees which is a

criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Buyer will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/Contractor(s)

(1.) The Bidder(s)/Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s)/Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.

a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer promise or give to any of the Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to the others, any information or document provided by the Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign Buyer, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (page no. 6).

e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intend to make to agents, brokers or any other intermediaries in the connection with the award of the contract.

f. Bidder(s) /Contractor(s) who have signed the integrity pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2.) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

(17) Check list for Terms and Conditions:

To be filled by the bidder and submitted along with the Technical Bid.

S. No.	Technical Information	Page No.	Remarks
1.	Tender Fee, if applicable		
2.	EMD		
3.	Company/ Firm registration details		
4.	Authorization Certificate		
5.	Average Annual turnover of the bidder, for the last three successive years should be four times of the approximate cost of the equipment duly certified by the Chartered Accountants.		
6.	Experience		
7.	Income tax return (Last Three Years)		
8.	Audited balance sheet (Last Three Years)		
9.	Original Technical Catalogue of the quoted model and same should be available on the website		
10.	Compliance Statement with relation to the technical specification as mentioned in the bidding document duly supported by the original catalogue.		
11.	Self-declaration for not black listed		
12.	Clientele list (list of users) of quoted model of the items, attach couple of orders without any alteration/modification		
13.	Performance certificate of the same supplied machine (of quoted make and Model) from clients		
14.	Warranty & extended technical support certificate		
15.	Acceptance of all terms / conditions towards after sales / services as mentioned in the bidding document.		
16.	Certificate, to the effect that the bidder is not supplying the quoted item(s) to any other Govt. / Pvt. Organizations / Institutions at the rate lower than the rate quoted against this tender.		
17.	Certificate for 'Class-I local supplier' and 'Class-II local supplier'		
18.	Certificate for verification of local content		
19.	Integrity Pact		

End of Tender Document