

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

EOINo. RCIL/NR/TM/JP/EOI/MGSU/CCTV/2025-26 DATE: 09 July 2025.

Corrigendum -6

Dated 21/08/2025

RailTel Corporation of India Ltd., (here after referred to as “RailTel”) invites Expression of Interest (EOI) Document for Selection of consortium partner for **“Installation & Commissioning of CCTV System at Maharaja Ganga Singh University, Bikaner”**

The details are as under:

SCHEDULE OF EVENTS

1	Last date for submission of Bids against EOI	28 -Augut-2025 at 15:00 Hours
2	Opening of Bids received against EOI	28 -August-2025 at 15:30 Hours

1. Scope of Work

Bidder has to Install & Commission CCTV System at Maharaja Ganga Singh University, Bikaner as per CoR's requirement ie. Maharaja Ganga Singh University, Bikaner .

For Visit of Customer site before Bid Please contact Sh. Shanker Lal Kumawat AGM , BKN 9717644165

Specification must be approved from end customer authorized representative i.e. Maharja Ganga Singh University before supply of material .

If any case Customer i.e Maharja Gan Singh University ask to change specification of any product then then Bidder (BA) will be supplied material accordingly Hence all specification of products must be approved before supply of material from end customer authorized representative i.e. Maharja Ganga Singh University

If any POC is required by end customer then Bidder (BA) will arrange same without any extra cost.

Detail scope of work with technical specification is as per BOM/ List of Items attached with EOI.

For More Details please contact Sh. Shanker Lal Kumawat , AGM Bikaner 9717644165

Warranty period will be one year from the Date of Completion of work .

1.1 Stage - I: Technical Bid contains the following: -

i). Eligibility Criteria

S. No.	Type	Description	Document Required
19.	Technical Specification	Technical Specification should be signed by Bidder	Data sheet of OEM should be enclosed

27.	CCTV OEM Terms & Condition	<ol style="list-style-type: none">(ERs) notified as part of the PPO for CCTV in Gazette of India (EXTRAORDINARY, PART II—Section 3— Sub-section (ii) dated 7th March, 2024, at Sr. No. No. 1062) issued by MeitY.Essential Requirements (ERs)- BIS as per gazette notification issued on April 9, 2024, extended compliance under the Bureau of Indian Standards (BIS) Compulsory Registration Order (CRO) schemeAll CCTV product must be STQC certified , STQC certificate must me enclosed.All CCTV product of same OEM	Bidder must submit the supporting Documents & Certification for the same..
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2. Payment Terms


- 12.1. Payment will be on 'back-to-back' basis and as per the payment terms mentioned in the Scope of Work. No advance will be payable to BA, if any advance received by RailTel from customer.
- 12.2. Payment will be released after receiving the invoice for the work / services and after RailTel has received the payment from CoR (Customer of RailTel) for the same work / services. Any deduction /Penalties levied by CoR on invoices of RailTel will be carried back-to-back and will be deducted from CSP's invoices on actual basis.
- 12.3. Coordination with COR (Customer of RailTel) Customer for releasing of payment is responsibility of selected bidder
- 12.4. Bidder is sole responsible for submission of all required document by COR (Customer of RailTel) for releasing payment or any other compliances.
- 12.5. Documents list required at the time of payment/invoice submission by selected bidder shall be: -

- i. PO copy issued to selected vendor.
- ii. Payment Proof that the end customer has paid to RailTel for the period claimed by selected bidder/vendor against invoices raised by RailTel for such services.
- iii. Submission/Declaration of applicable BG amount against PO issued to selected bidder/vendor.
- iv. Original Invoice for the period claimed
- v. TDS declaration
- vi. GST submission by Bidder to RailTel
- vii. Work Completion Certificate signed by authorized representative of COR i.e. MGSU
- viii. Delivery Challan signed by authorized representative of COR i.e MGSU.
- ix. Photocopy of all documents submitted by RailTel along with their invoice to customer
- x. Any other Document required by COR (Customer of RailTel)

COMPLETION PERIOD: - 45 Days from the Date of work order

Technical specifications of 8 MP Bullet Camera , 2 MP Bullet Camera, 2 MP Dome Camera , 2 MP 45 X Full HD Network IR PTZ Camera , 4MP IR AI Enforcement Camera , 32 CH 4K Network Video Recorder , 16 CH,4K Network Video Recorder is read as follows:

8 MP BULLET CAMERA	
8MP Bullet Camera	
Feature	Specification
Image Sensor	1/2.8" 8MP PS CMOS Image Sensor or better
Effective Pixels	3840 (H) × 2160 (V)
Minimum Illumination	(Color-0.5 Lux & Monochrome-0.05 Lux) or better
Shutter Speed	Auto/Manual 1/5 s–1/100,000 s
White Balance	Auto, Manual, Street lamp, Natural, Outdoor
Lens Type	Vari-focal
Max. Aperture	F1.6 or better
Lens	2.8 mm–12 mm
Back Light Compensation	BLC/ HLC/ WDR(120dB)
IR	IR Range of 50 Mtr.
S/N Ratio	> 50 dB
Video Compression	Instastream, H.265, H.264+, H.264, H.264H, H.264B, MJPEG (Only supported by sub stream)
Noise Reduction	3D NR
Resolution	8M (3840 × 2160), 6M (3072 × 2048), 5M (3072 × 1728), 4M (2880 × 1620/2688×1520), 3M (2048 × 1536/2304 × 1296), 2M (1920 × 1080), 1.3M (1280 × 960), 720p (1280 × 720), D1 (704 × 576/704 × 480), VGA (640 × 480), CIF (352 × 288/352 × 240)
Stream Capability	Quad Stream
Frame Rate	1-30fps
Motion detection	Yes
Audio	Built-in Mic
Iris Control	Fixed
Video format	PAL/NTSC
Privacy Mask	4 areas
ROI	Support
Day/Night	Auto/ICR/Color/B/W
OSD	Camera title, Date & Time
Protocol	IPv6, IPv4, DNS, RTCP, NTP, RTP, HTTP, HTTPS, TCP/IP, ICMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), multicast
Ethernet	RJ-45 (10/100 Base-T)
Mirror Function	Support
IR Control	Support
Image Rotation	Support
Audio Compression	G.711a/G.711Mu/G.726, PCM
Audio Input	1 Channel (RCA port)
Audio Output	1 Channel (RCA port)
Alarm IN	1 channel in: wet contact
Alarm Out	1 channel out: wet contact
Bit Rate Control	CBR/ VBR
Storage	Mirco SD card (Max. 256GB) with 64GB SD Card
Weatherproof Standard	IP67 & IK10 (optional)
Power Source	12 VDC/PoE (802.3af)
Power Consumption	<15W
Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing

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2MP BULLET CAMERA	
2MP IR Network Bullet Camera	
Feature	Specification
Image Sensor	1/2.8" 2MP PS CMOS Image Sensor
Effective Pixels	1920 (H) × 1080 (V)
Minimum Illumination	0.01 lux@F1.2-F1.4 (Color, 30 IRE)
Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
White Balance	Auto, Manual, Street lamp, Natural, Outdoor
Max. Aperture	F1.2-F1.6 or better
Lens	3.6mm fixed Lens
Video Compression	Instastream, H.265, H.264+, H.264, H.264H, H.264B, MJPEG (Only supported by the sub stream)
S/N Ratio	>56dB
IR	IR Range of 30-50 Mtr. Or better
Smart IR	Support
Back Light Compensation	BLC/ HLC/ DWDR
Resolution	2M (1920 × 1080), 1.3M (1280 × 960), 720p (1280 × 720), D1 (704 × 576/704 × 480), VGA (640 × 480), CIF (352 × 288/352 × 240)
Noise Reduction	3D NR
Motion detection	Yes
Stream Capability	Dual stream
Frame Rate	Main stream: 2M (1920 × 1080)@1–25/30 fps Sub stream: D1 (704 × 576)@1–25 fps/ (640 × 480)@1–15 fps
Video format	PAL/NTSC
Privacy Mask	3 areas or better
IVS (Optional)	Tripwire, Intrusion
ROI	Support (4 areas)
OSD	Camera title, Date & Time
Audio	Built-in Mic
Audio Compression	G.711a/G.711Mu/PCM/G.726
Bit Rate	H.265: 12 kbps–4096 kbps, H.264: 32 kbps–4096 kbps
Bit Rate Control	CBR/VBR
Protocol	IPv6, IPv4, DNS, RTCP, NTP, RTP, HTTP, HTTPS, TCP/IP, ICMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), multicast
Day/Night	Auto/ICR/Color/B/W
Ethernet	RJ-45 (10/100 Base-T)
Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2M resolution and lower)
Storage	Mirco SD card (Max. 512GB) with 64GB SD Card
Weatherproof Standard	IP67
Iris Control	Fixed
Power Source	12 VDC/PoE (802.3af)
Power Consumption	<12W
Operating Temperature	–30 °C to +60 °C (–30 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing

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2 MP DOME CAMERA	
2MP IR Network Dome Camera	
Feature	Specification
Image Sensor	1/2.8" 2MP PS CMOS Image Sensor
Effective Pixels	1920 (H) × 1080 (V)
Minimum Illumination	0.01 lux@F1.2-F1.4 (Color, 30 IRE)
Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
White Balance	Auto, Manual, Street lamp, Natural, Outdoor
Max. Aperture	F1.2-F1.6 or better
Lens	3.6mm fixed Lens
Video Compression	Instastream, H.265, H.264+, H.264, H.264H, H.264B, MJPEG (Only supported by the sub stream)
S/N Ratio	>56dB
IR	IR Range of 30-50 Mtr. Or better
Smart IR	Support
Angle of View	3.6 mm: H: 86°, V: 47°, D: 103°
Back Light Compensation	BLC/ HLC/ DWDR
Resolution	2M (1920 × 1080), 1.3M (1280 × 960), 720p (1280 × 720), D1 (704 × 576/704 × 480), VGA (640 × 480), CIF (352 × 288/352 × 240)
Noise Reduction	3D NR
Motion detection	Yes
Stream Capability	Dual stream
Frame Rate	Main stream: 2M (1920 × 1080)@1–25/30 fps Sub stream: D1 (704 × 576)@1–25 fps/ (640 × 480)@1–15 fps
Video format	PAL/NTSC
Privacy Mask	3 areas or better
IVS (Optional)	Tripwire, Intrusion
ROI	Support (4 areas)
OSD	Camera title, Date & Time
Audio	Built-in Mic
Audio Compression	G.711a/G.711Mu/PCM/G.726
Bit Rate	H.265: 12 kbps–4096 kbps, H.264: 32 kbps–4096 kbps
Bit Rate Control	CBR/VBR
Protocol	IPv6, IPv4, DNS, RTCP, NTP, RTP, HTTP, HTTPS, TCP/IP, ICMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), multicast
Day/Night	Auto/ICR/Color/B/W
Ethernet	RJ-45 (10/100 Base-T)
Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2M resolution and lower)
Storage	Mirco SD card (Max. 512GB) with 64GB SD Card
Weatherproof Standard	IP67
Iris Control	Fixed
Power Source	12 VDC/PoE (802.3af)
Power Consumption	<12W
Operating Temperature	–30 °C to +60 °C (–30 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing

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2MP 45X FULL HD NETWORK IRPTZ CAMERA	
2MP 45x Full HD Network IR PTZ Camera	
Feature	Specification
Image Sensor	1/2.8" 2MP PS CMOS Image Sensor
Effective Pixels	1920(H) x 1080(V)
Minimum Illumination	Color: 0.03lux or better
Focus Control	Auto/Semi-Auto/Manual
White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/Natural light/Street lamp
Lens	5.7~205.3mm or better
Max. Aperture	F1.6 or better
Angle of View	H63°~H3°/D75°~D2°/V40°~V1°
Iris Control	Auto/Manual
Electronic Shutter	1/1 s~1/30,000 s
Back Light Compensation	BLC / HLC / WDR(120dB)
S/N Ratio	≥ 55 dB
Optical Zoom	36x or better
Digital Zoom	16x
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -20° to +90°, auto flip 180°
Power off memory	Support
Manual Speed	Pan: 1° ~240° /s, Tilt: 1° ~120° /s or better
Preset Speed	Pan: 240°/s, Tilt: 200°/s or better
Image Stabilization	Electronic (EIS)
Privacy Masking	8 zones or better
Special Features	Up to 256 Presets, 4 Pattern, 8 Tour(groups)
Defog	ON/OFF
IR Distance	250 Mtr. Or better
Day/Night	Auto /ICR//Color/B/W
Video Format	PAL/NTSC
OSD	Camera title, Date & Time
Video Compression	Instastream, H.265, H.264+, H.264H, H.264B, H.264, MJPEG(Sub Stream)
Resolution	2MP (1920 × 1080), 1MP (1280 × 720), CIF (352 × 288)
Frame Rate	Main stream: 2MP/1MP/D1 @(1-25/30 fps) sub stream 1: 2MP/1MP/D1 @(1- 25/30 fps) Sub stream 2:D1/CIF @(1-15/30 fps) Sub stream 3: D1/CIF @(1-15/30 fps)
Stream Capability	H.265 Quad Stream
Bit Rate Control	CBR/VBR
Motion Detection	Support
ROI	Support
Noise Reduction	2D/3D DNR
Audio In	1 channel
Audio Out	1 channel
Audio Compression	PCM/G.711(u/a)/G.711Mu/G.726/MPEG2-Layer2/G722.1
Alarm I/O	1/1 channel In/Out
Ethernet	RJ-45 (10/100Base-T)
Protocols	IPv4, IPv6, HTTP, HTTPS, ARP, RTSPS, SMTP, DHCP, DNS, UPnP, NTP, SNMP, ICMP, IGMP, ONVIF (Profile S, Profile G)
IVS (Optional)	Motion detection
Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot.
Storage	SD card (support max. 256 GB) with 64GB SD Card
Operating Temperature	-30 °C to +60 °C
Operating Humidity	≤ 95% RH, Non condensing
Weather Proof Standard	IP67, IK10, TVS 6000V lightning proof, surge protection, voltage transient protection
Power Source	24 VDC
Power Consumption	25W(max)

4MP IR AI ENFORCEMENT CAMERA

4MP IR AI Enforcement Camera	
Feature	Specification
Image Sensor	1/2.8" 4 MP CMOS sensor or better
Effective Pixels	2688 (H) × 1520 (V)
Minimum Illumination	0.001 Lux or better
Shutter Speed	Auto/Manual 1/50 s–1/100,000 s
White Balance	Auto
Lens Type	Motorized vari-focal
Max. Aperture	Max. F1.2
Lens	6 mm- 20 mm or better
Video Compression	H.265, H.264, MJPEG
Back Light Compensation	BLC/ HLC/ WDR(140dB)
S/N Ratio	> 55 dB or better
Angle of View	Horizontal: 18°–42°, Vertical: 10°–24°, Diagonal: 20°–45° or better
Resolution	4M (2688 × 1520), 1080p (1920 × 1080), 720p (1280 × 720), D1 (704 × 576), CIF (352 × 288)
Frame Rate	Max. 30 fps Main stream (2688 × 1520@30 fps), sub stream (704 × 576@30 fps)
Video format	PAL/ NTSC
IR Led	Support
IR	IR Range of 30 Mtr. or better
Day/Night	Day/Night/Auto/Customised/Scheduled
Protocol	IPv6, IPv4, DNS, RTCP, NTP, RTP, HTTP, HTTPS, SNMP, TCP/IP, UDP, ICMP, SSL, DHCP, SMTP, RTSP, ONVIF (Profile S, Profile G, Profile T).
Bit Rate Control	CBR/VBR
Speed Detection Range	0 km/h–180 km/h
Ethernet	1 × RJ-45 Ethernet port, 10/100M network transmission
OSD	Camera title, Date & Time
Defog	Support
Time Synchronization	NTP
Vehicle Color Recognition	Yes
ANPR Technology	Adopts developed algorithms to recognize license plate numbers and letters
Vehicle Type Recognition	Yes
Automatic Network Recovery (ANR)	Platform and FTP (SD card is required)
Audio Input	1 Channel
Audio Output	1 Channel
Alarm IN	1 Channel or better
Alarm Out	1 Channels or better
Storage	NAS, Mirco SD card (Max. 256GB) with 64GB SD Card
Power Source	12-36 VDC, PoE
Power Consumption	≤ 13 W
Weatherproof Standard	IP67 & IK10
Operating Temperature	–40 °C to +65 °C (–40 °F to +149 °F)
Operating Humidity	10%-90% (RH)

32 CH. 4K NETWORK VIDEO RECORDER	
32Ch. 4K Network Video Recorder	
Feature	Specification
Processor	Embedded processor
IP Camera Input	32 channel
Operating System	Embedded LINUX
Video Output	1 × VGA output, 1 × HDMI output
Compression	H.265/Smart H.264+/H.264/MJPEG
Network Bandwidth	Access: 160 Mbps; Storage: 128 Mbps; Forward: 48 Mbps
Resolution	8MP; 5MP; 3MP; 1080P; 720P; D1
Multi-screen Display	1 , 4, 8, 9, 16, 25, 32 views
Third-party Camera Access	ONVIF; RTSP
General Alarm	Motion detection
Alarm Linkage	Recording, snapshot, local external alarm output, audio, buzzer, log, preset, and email
Audio Compression	PCM/G711(U/A)/G711U/G726/AAC
Audio Input	1 × RCA input
Audio Output	1 × RCA output
Alarm Input	2 Channel
Alarm Output	1 Channel
Record Mode	Manual record; alarm recording
Hard Disk	2 SATA, up to 10 TB for a single HDD
Multi-channel Playback	Up to 9 channels for playback
Playback Function	Play/pause/stop/slow/quick/backward/by frame Full screen
Storage	Local HDD
Backup	USB storage device
Interface Ports	2 USB Ports (1 × front USB2.0; 1 × back USB2.0)
Ethernet	1 × RJ-45, 10/100/1000 Mbps self-adaptive Ethernet port
Protocols	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; RTSP; SMTP; DHCP; DNS; DDNS, ONVIF (profile T/S/G)
Power Supply	12 V DC, 3 A
Power Consumption	< 30 W (HDD not included, idling)
Working Temperature	-10°C to +55°C (+10 °F to +131 °F)
Working Humidity	10%~85%

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16 CH. 4K NETWORK VIDEO RECORDER

16Ch. 4K Network Video Recorder	
Feature	Specification
Processor	Embedded processor
IP Camera Input	16 channel
Operating System	Embedded LINUX
Video Output	1 × VGA output, 1 × HDMI output
Compression	H.265/Smart H.264+/H.264/MJPEG
Network Bandwidth	Access: 160 Mbps; Storage: 160 Mbps; Forward: 64 Mbps
Resolution	8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1
Multi-screen Display	1 , 4, 8, 9, 16 views
Third-party Camera Access	ONVIF; RTSP
General Alarm	Motion detection
Alarm Linkage	Recording, snapshot, audio, buzzer, log, preset, and email
Audio Compression	PCM/G711(U/A)/G711U/G726/AAC
Audio Input	1 × RCA input
Audio Output	1 × RCA output
Record Mode	Manual record; alarm recording
Hard Disk	2 SATA, up to 10 TB for a single HDD
Disk Group	Yes
Multi-channel Playback	Up to 16 channels for playback
Playback Function	Play/pause/stop/slow/quick/backward/by frame, Full screen
Storage	Local HDD, network
Backup	USB storage device
Interface Ports	2 USB Ports (1 × front USB2.0; 1 × back USB2.0)
Ethernet	1 × RJ-45, 10/100 Mbps
Protocols	HTTP; TCP/IP; IPv4/IPv6; RTSP; SMTP; NTP; DHCP; DNS; IP Filter; DDNS; FTP; P2P, ONVIF (profile T/S/G)
Power Supply	12 V DC, 4 A
Power Consumption	< 10 W (HDD not included, idling)
Working Temp	-10°C to +55°C (+10 °F to +131 °F)

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