

RailTel Corporation of India Ltd

(A Mini Ratna PSU under Ministry of Railways)

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

EOI No.: RailTel/SR/SBC/DRDO-CCTV Dated 28-02-2025

For finalising BA/SI to participate in the tender called for by

DRDO Tender No: GEM/2024/B/5536311 Dt: 12/11/2024 for "SITC OF

CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL

MAINTENANCE CONTRACT"



रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड (रेल मंत्रालय के अधीन एक मिनी रत्न सार्वजनिक उपक्रम)

नंबर-6/1, 12वीं मुख्य, माउंट कार्मेल कॉलेज के सामने, वसंतनगर, बैंगलोर 560052

निविदा आमंत्रण सूचना

ईओआई नोटिस संख्याः रेलटेल/एसआर/एसबीसी/डीआरडीओ -सीसीटीवी दिनांक 28-02-2025

रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड, (इसके बाद "रेलटेल" के रूप में संदर्भित) केवल बी डीआरडीओ, बैंगलोर के लिए उपयुक्त भागीदार के चयन के लिए रेलटेल के सूचीबद्ध बिजनेस एसोसिएट्स (बीए) बिजनेस पार्टनर (बीपी) / आईटी-आईसीटी बिजनेस पार्टनर्स से निविदा संख्या: GEM/2024/B/5536311 दिनांक: 12/11/2024 "सीसीटीवी निगरानी प्रणाली की स्थिति और व्यापक वार्षिक रखरखाव अनुबंध" के लिए के साथ संलग्न विवरण और विनिर्देशों के अनुसार "सीसीटीवी सिस्टम के उन्नयन और व्यापक वार्षिक रखरखाव अनुबंध" के लिए ईओआई आमंत्रित करता है।

ईओआई अनुसूची और अन्य विवरण इस प्रकार हैं:

1	वेबसाइट के माध्यम से ईओआई की उपलब्धता	28-02-2025 को 13:00 बजे से			
2	बोली जमा करने की आरंभ तिथि	28-02-2025 को 13:00 बजे से			
3	ऑफर जमा करने की अ <mark>ंतिम ति</mark> थि	05-03-2025 को 17:00 बजे से पहले			
4	बोलीदाताओं के प्रस्तावो <mark>ं को खोल</mark> ना	05-03-2025 को 17:30 बजे			
5	ईओआई की अनुमानित राशि	Rs.47,41,80,000/-			
6	टोकन बयाना राशि जमा	₹ 5,00,000/-**			
7	निष्पादन बैंक गारंटी	एलओए का 3%			
8	जेवी/कंसोर्टियम की अनुमति	नहीं			
	ऑफर <u>https://railtel.enivida.com</u> पर प्रस्तुत किए जाएंगे ।				

** सफल बोलीदाता को रेलटेल से सूचना प्राप्त होने पर तुरंत एक बार में ₹ 42,41,800/- की शेष बयाना राशि जमा करनी होगी।

डीआरडीओ, बैंगलोर के सभी नियमों और शर्तों में काम का दायरा, आईटीटी, जीटीसी, भुगतान, एसएलए और जुर्माना, वारंटी आदि शामिल हैं, सभी बोली लगाने वालों द्वारा अनुपालन किया जाएगा और सफल भागीदार के साथ बैक टू बैक आधार पर लागू होगा। इस कार्यालय से एलओआई/एलओए/पीओ/एसओ जारी होने की तारीख से 03 महीने के भीतर सभी प्रकार से पूरा कार्य पूरा किया जाएगा।

डीआरडीओ, बैंगलोर का निविदा दस्तावेज इस ईओआई के अंत में रखा गया है। उद्धृत मूल्य सभी करों, शुल्कों, लेवी आदि सहित होगा।

सभी दस्तावेजों को पृष्ठ संख्या के साथ उचित अनुक्रमण और हस्ताक्षर के साथ प्रस्तुत किया जाना चाहिए। किसी भी स्पष्टीकरण के लिए निम्नलिखित नामित अधिकारियों से संपर्क किया जा सकता है:

किसी भी स्पृष्टीकरण के लिए निम्नलिखित नामित अधिकारियों से संपर्क किया जा सकता है:

प्रथम स्तर

आलोक रंजन

सहायक महाप्रबंधक/विपणन-तकनीकी

ईमेल: alok@railtelindia.com

दूसरा स्तर के.कुमार

महाप्रबंधक / बैंगलोर

इमेल: kumar@railtelindia.com

बोलीदाताओं से अनुरोध है कि वे ईएनआईवीआईडीए पोर्टल के साथ पंजीकृत हों और किसी भी संशोधन/शुद्धिपत्र के लिए समय-समय पर जांच करें।



RAILTEL CORPORATION OF INDIA LIMITED

(A Mini Ratna PSU under Ministry of Railways)
No-6/1, 12th Main, Opp-Mount Carmel College,
Vasanthnagar, Bangalore 560052

Notice Inviting Tender

EOI Notice No: RailTel/SR/SBC/DRDO-CCTV Dated 28-02-2025

RailTel Corporation of India Ltd., (hereinafter after referred to as "RailTel") invites EOIs from RailTel's Empanelled Business Associates (BA) Business Partner (BP)/IT-ICT Business Partners only for the selection of suitable partner for DRDO, Bangalore Tender No: GEM/2024/B/5536311 Dt: 12/11/2024 for "SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT" as per the description and specifications enclosed herewith.

The EOI schedule and other details are as under:

1	Availability of EOI through Website	From 13:00 Hrs. of 28-02-2025				
2	Bid Submission Start Date	From 13:00 Hrs. of 28-02-2025				
3	Last date for submission of offers	05-03-2025 before 17:00 Hrs				
4	Opening of Bidder's offers	17:30 Hrs of 05-03-2025				
5	Estimated Amount of EOI	Rs.47,41,80,000/-				
6	Token Earnest Money deposit	Rs.5,00,000/-**				
7	Performance Bank Guarantee	3% of the LoA				
8	JV / Consortium	Not allowed				
	Offers shall be submitted in https://railtel.enivida.com					

^{**} The successful bidder shall submit balance Earnest Money deposit of Rs.42,41,800/- at once on the advice is received from RailTel.

All the terms & conditions of DRDO, Bangalore including Scope of work, ITT, GTC, Payments, SLA & Penalties, warranty etc., shall be complied with by all bidders and applicable on back-back basis with the successful partner. Entire work shall be completed in all respects within 03 months from the date of issue of LoI/LoA/PO/SO from this office.

The tender document of DRDO, Bangalore is placed at the end of this EoI. Price quoted shall be all inclusive of taxes, duties, levies etc.,

All the documents must be submitted with proper indexing with page numbers & signed.

For any clarification following designated officials may be contacted:

1st Level 2nd Level Alok Ranjan K.Kumar

AGM/Mktg General Manager/Bangalore Email: alok@railtelindia.com Email: kumar@railtelindia.com

The bidders are requested to get registered with eNivida portal and do check from time to time for any Amendments/Corrigendum. For any interpretation, English version of NIT will be final.

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1. Introduction about RailTel

RailTel Corporation of India Limited (RailTel), an ISO-9001:2000 organization is a Mini Ratna Government of India undertaking under the Ministry of Railways. The Corporation was formed in Sept 2000 with the objectives to create nationwide Broadband Telecom and Multimedia Network in all parts of the country, to modernize Train Control Operation and Safety System of Indian Railways and to contribute to realization of goals and objective of national telecom policy 1999.

RailTel has approximately 60000 Kms of OFC along the protected Railway tracks. The transport network is built on high capacity DWDM and an IP/ MPLS network over it to support mission critical communication requirements of Indian Railways and other customers. RailTel has Tier-III Data Center in Gurgaon and Secunderabad hosting / collocating critical applications. RailTel is also providing Telepresence as a Service (TPaaS), where a High-Definition Video Conference facility bundled with required BW is provided as a Service.

For ensuring efficient administration across India, country has been divided into four regions namely, Eastern, Northern, Southern & Western each headed by Executive Director and Headquartered at Kolkata, New Delhi, Secunderabad & Mumbai respectively. These regions are further divided into territories for efficient working. RailTel has territorial offices at Guwahati, & Bhubaneswar in East, Chandigarh, Jaipur, Lucknow in North, Chennai & Bangalore in South, Bhopal, and Pune & Ahmedabad in West. Various other territorial offices across the country are proposed to be created shortly.

RailTel's business service lines can be categorized into three heads namely B2G/B2B (Business to Government and Business to Business) and B2C (Business to customers):

a) Licenses & Service portfolio:

Presently, RailTel holds Infrastructure Provider -1, National Long-Distance Operator, International Long-Distance Operator and Internet Service Provider (Class-A) licenses under which the following services are being offered to various customers:

- MPLS VPN
- Internet Leased Line
- Transport Services
- Dark Fibre
- Tower Colocation
 - Core Services



- Tele-Presence as a Services (HD video Conferencing)
- RailWire (Broadband Services)
- Data Centre Services
- Turnkey Solutions in ICT
- Digital Service (Aadhaar based solution, Railwire Saathi, Online Tendering, WiFi as a Service, Predictive maintenance etc)

Value Added Services



- Station Wi-Fi
- Content on Demand (COD)
- Video Surveillance Services
- Railway Display Network (RDN)
- High Speed Mobile Corridor

Emerging Services



b) CARRIER SERVICES

- 1. National Long Distance: Carriage of Inter & Intra -circle Voice Traffic across India using state of the art NGN based network through its Interconnection with all leading Telecom Operators
- 2. Lease Line Services: Available for granularities from E1, DS-3, STM-1 & above
- 3. Dark Fiber/Lambda: Leasing to MSOs/Telco's along secured Right of Way of Railway tracks
- 4. Co-location Services: Leasing of Space and 1000+ Towers for collocation of MSC/BSC/BTS of Telco's

c) **ENTERPRISE SERVICES**

- 1. Managed Lease Line Services: Available for granularities from E1, DS-3, STM-1 & above
- 2. MPLS VPN: Layer-2 & Layer-3 VPN available for granularities from 2 Mbps & above
- 3. Dedicated Internet Bandwidth: Experience the "Always ON" internet connectivity at your fingertips in granularities 2mbps to 155mbps

d) RETAIL SERVICES

Rail wire: Triple Play Broadband Services for the Masses. It is a pilot project undertaken by RailTel and currently services are offered out of Bangalore and nearby places.

2. Project Background and Objective of EOI

RailTel intends to participate in the **DRDO** Tender No: GEM/2024/B/5536311 DT: 12/11/2024 for "SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT" as per the description and specifications enclosed herewith.

Accordingly, RailTel invites EOIs from RailTel's Empaneled Business Associates (BA) Business Partner (BP)/ IT-ICT Business Partners for the selection suitable partner for bidding in DRDO, BANGALORE Tender No: GEM/2024/B/5536311 DT: 12/11/2024 for "SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT" as per the description and specifications enclosed herewith.

3. Scope of Work

The scope of work is as mentioned in the DRDO, BANGALORE Tender No: for GEM/2024/B/5536311 DT: 12/11/2024 for "UPGRADATION OF CCTV SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT" as per the description and specifications enclosed herewith.

3.1 Schedule of Requirement For detailed scope of work, may please refer to DRDO, BANGALORE tender document attached as part of Eol. RailTel intend to select a partner who is willing to accept all terms & conditions on back-to-back basis for their scope and portion of work. In case of any discrepancy or ambiguity in any clause/ specification pertaining to scope of work area, the Tender released by end Customer (i.e. DRDO, BANGALORE) shall supersede and will be considered sacrosanct. (All associated clarifications, responses to queries, revisions, addendum, and corrigendum, associated Prime Service Agreement (PSA)/ MSA/ SLA also included).



4. Response to EOI guidelines

4.1 Language of Proposals

The proposal and all correspondence and documents shall be written in English.

4.2 RailTel's Right to Accept/Reject responses

RailTel reserves the right to accept or reject any response and annul the bidding process or even reject all responses at any time prior to selecting the partner, without thereby incurring any liability to the affected bidder or **Partner** or without any obligation to inform the affected bidder or bidders about the grounds for RailTel's action.

4.3 EOI response Document

The bidder is expected to examine all instructions, forms, terms and conditions and technical specifications in the bidding documents. Submission of bids, not substantially responsive to the bidding document in every aspect will be at the bidder's risk and may result in rejection of its bid without any further reference to the bidder.

All pages of the documents shall be signed in ink by the bidder including the closing page in token of his having studies the EOI document and should be submitted along with the bid. A copy of signed EOI along with it's all Corrigendum/Addendum is required to be submitted through RailTel portal duly signed digitally.

4.4 Period of Validity of bids and Bid Currency:

Bids shall remain valid for a period of Six Months from the date of opening of Tender No. GEM/2024/B/5536311 DT: 12/11/2024 of DRDO, BANGALORE. If any extension is required by customer, then the same will be extended for further period.

4.5 Negotiation:

RailTel reserves the right to negotiate with the bidder to make the bid competitive. The tenderer/s shall not increase his/their quoted rates including payment terms in case the RailTel Administration negotiates for reduction of rates. Such negotiations shall not amount to cancellation or withdrawals of the original offer and the rates originally quoted will be binding on the tenderer/s.

4.6 All offers in the prescribed forms should be submitted before the time and at fixed for the receipt of the offers. In case the schedule of requirement quoted by tenderer is incomplete with reference to tender document, the offer is liable to be rejected.

4.7 ATTESTATION OF ALTERATION:

No scribbling is permissible in the tender documents. Tender containing erasures and alterations in the tender documents are liable to be rejected. Any corrections made by the tenderer/ tenderers in his /their entries must be signed and stamp (Not initiated) by him/them.

- 4.8 The offer should be submitted at https://railtel.enivida.com as mentioned in the NIT. The offer should be complete in all aspects.
- 4.9 The bidder should submit along with all the applicable documents as per the EOI

4.10 Information to Bidder

- 4.10.1 Guidelines for preparations of response to this EoI Bidder are requested to follow the below guidelines while preparing the response to EoI.
 - a. The price bid should be in format provided in the Annexure-I, any bid not found responsive to the details mentioned in this document may be rejected.
 - b. The bidder is requested to review the response before submission as the submitted responses shall be considered final and revisions may not be permitted unless there are genuine reasons for such revisions.
 - c. Bidder should download the document and sign each page & fill the bid sheet (Annexure-I) attach all documents as required for this EOI document and submit the complete bid as explained in the EOI document. Late and delayed response to this EOI shall not be considered.
- 4.10.2 Bid Earnest Money (EMD): Rs.5,00,000/- to be paid in the form of RTGS/NEFT/DD alongwith the offer as a token EOI EMD and the successful bidder shall submit balance EMD of Rs.42,41,800/- at once on advice from RailTel in the form of RTGS/NEFT/DD/irrevocable Bank Guarantee in favour of RailTel Corporation of India Ltd as detailed below:

Bank Detail for RTGS:
Name: RailTel Corporation of India Ltd
Bank: Union Bank of India
Branch: RP Road, Secunderabad
A/C Number: 327301010373007
IFSC Code: UBIN0805050

MICR Code: 500026009

Company Tax Details
PAN: AABCR7176C
GSTN: 29AABCR7176C1Z9

4.10.3 Security Deposit / Performance Bank Guarantee: The selected Partner shall have to submit a Bank Guarantee against Security Deposit in proportion to the ordered value to RailTel as back-to-back arrangements for the Bid. The rate and value of SD/PBG shall be as per Tender No. GEM/2024/B/5536311 DT: 12/11/2024 of DRDO, Bangalore.

- 4.10.4 In the case the bid is successful the PBG also will have to be submitted to RailTel on back-to-back basis.
- 4.10.5 In case work share arrangements are mutually agreed between RailTel and **Partner** then the PBG will be proportionately decided.
- 4.11 Last date & time for Submission of EOI response
 EOI response should be submitted to RailTel as explained in the EOI document. The bids submitted after the specified date and time mentioned in the EOI will be summarily rejected.
- 4.12 Modification and/or Withdrawal of EOI response
 EOI response once submitted will treated, as final and no modification will be permitted.
 No correspondence in this regard will be entertained.

No bidder shall be allowed to withdraw the response after the last date and time for submission. The successful bidder will not be allowed to withdraw or back out from the response commitments. In case of withdrawal or back out by the successful bidder, the Earnest Money Deposit shall be forfeited, and all interests/claims of such Partner shall be deemed as foreclosed. In addition, if selected partner withdraws its offer, then the Partner may be blacklisted.

4.13 Details of Financial bid for the above referred tender

The final bid for the tender will be prepared jointly with the selected **Partner** for its respective portion so that RailTel puts in an optimal bid with a good chance of winning the Tender. Moreover, RailTel reserves the right for further negotiation and deduction in prices from the selected Service Partner to keep the RailTel's bid in winning position in the DRDO, BANGALORE tender.

4.14 Clarification of EOI Response

To assist in the examination, evaluation, and comparison of bids the purchaser may, at its discretion, ask the Service Partners for clarification. The response should be in writing and no change in the price or substance of the EOI response shall be sought, offered, or permitted.

4.15 Period of Association/Validity of Agreement

RailTel may enter into a pre-bid agreement with selected partner with detailed back-to-back Terms and conditions for respective selected portion of scope in each of the packages prior to submission of RailTel bid against DRDO, BANGALORE Tender No. GEM/2024/B/5536311 DT: 12/01/2025 and its corrigendum thereof.

5 Eligibility Criteria for Partners:

The bidders must comply with the following conditions for their eligibility in the participation for the EOI. Submit necessary declarations/certifications as per Tender Terms and Conditions:

SI. No.	Parameter	Eligibility Criteria	Supporting Documents to be Submitted	Complia nce (Y/N)
A)	Association with RailTel The Bidder Should be RailTel's Empanelled Business Associates (BA) Business Partner (BP) with validity of association at least upto the last date of submission of this bid. This is the primary and mandatory eligibility criteria; however, the bidder is also required to meet other eligibility criteria of this EOI.			(1714)
B)	Financial Conditi	ons		
i)	Company Registration	Should be registered under Companies Act, 1956 or Companies Act 2013 or as amended and should have at least 3 years of operations in India as on bid submission date.	1. Certificate of Incorporation / Firm Registration 2. GST Registration 3. PAN Card	
ii) Average a) Tender in the last 2019-20, 2 & 2024-2 achieved annual tu Startup & have a cumulative in 2 Y		cumulative turnover of RS. 4 Crores	Turnover Certificate issued by the Statutory Auditors along with copy of the CA financial statements to be submitted. P&L statements and ITR for last consecutive 05 years.	

iii)	Positive Net	Bidder should also have a positive	Positive Net Worth Certificate
	worth	net worth.	issued by the Statutory Auditors
			along with copy of the CA audited
			financial statements required.
iv)	Liquid assets	Liquid assets and/or availability of	Credit lines/ letter of credit /
		credit facilities of not less than Rs	certificates from banks is
		2845 Lakhs for meeting the fund	required.
		requirement etc.	

C)	Technical Condit	ions		
(i)	Work experience	The bidder must have executed similar work in last 7 years ending last day of month previous to the one in which EOI is invited.	To this extent necessary PO copies/agreement copies / completion certificates. The information should also be submitted in the Annexure-XI.	
		One similar work of not less than the Value Rs. 20 Crore. OR Two similar works each of not less than the Value of Rs. 15 Crore. OR	For ongoing works: Ongoing works will be considered for value of completed work (minimum 70% work completion) certified by PO issuing authority / customer mentioning	
		3. Three similar works each of not less than Value of Rs. 10 Crore. of estimated value of contract.	completed work value on the certificate along with satisfactory completion certificate for work completed so far.	
		Definition of similar work: Works entailing completion of Supply, Installation, Testing and Commissioning of a project in the field of CCTV Security		
		Surveillance/ Perimeter Security/NOC/SOC/Data Center/Cloud/IT/ICT/Telecom for any Government department or Public Sector Units or public listed companies/ State Govt. / PSU's / Govt. Bodies / Military Engineering Service/ Railways. /		
		Private Companies Note: Ongoing works will be		
	I	considered for value of completed work (minimum 70% work completion) certified by PO issuing authority / customer mentioning completed work value on the certificate along with		
	D	on the certificate along with satisfactory completion certificate for work completed so far. It shall be additional to above mentioned clause.		

	(i)	MAF	The bidder needs to submit the	MAF as per the Tender Document	
			documents required under MAF	of DRDO Tender No.	
			from the respective OEMs (edge	GEM/2024/B/5536311 DT:	
			device solution for hardware and	12/11/2024 the tender	
			software) as part of the solution	document. The bidder is required	
			mentioning Back-to-Back	to submit two number of MAFs as	
			arrangement, TAC support, End of	mentioned below:	
			Support.	(i) The first MAF is required to be	
				addressed to RailTel referring	
				this subject EOI in favour of	
				Bidder.	
				(ii) The Second MAF is required	
				to be addressed to DRDO	
				referring DRDO tender and	
1				in favour of RailTel.	
1	(ii)		Bidder shall comply with the	Need to comply with DRDO	
		Purchase	clauses as per the Tender	tender requirements, if any.	
		Preference	Document and the bidder must		
		Policy (linked	submit the compliance certificate		
		with Local	for the same as per the		
		Content)	Tender Document		

A Copy of Purchase/Work Order & its Commissioning Certificate issued by Work Awarding Organization is to be submitted with EOI. Also, contact Details of concerned person i.e., Name/Designation/Contact Number/Official Email ID, of the Work Awarding Organization needs to be mentioned.

For On-going projects, proof of satisfactory laying/part completion certificate for the desired quantity issued & signed by the competent authority of the client entity along with the supporting documents such as work order/purchase order clearly highlighting the scope of work, bill of material and value of the contract/ order.

- a) "Similar Works" means Installation and commissioning of Network Video CCTV System including Cameras, Video Management Software System, Access Level Layer 2/Layer 3 Switches or any related IT Systems with having obtained authorization from the OEM of the Video Management Software.
- b) Substantially completed works means those Works Which are at least 70% completed as on the date of tender submission (i.e gross value of Work done up to the last Date of Submission is 70% or more of the original contract price) and continuing satisfactorily.
- c) Last seven (7) Years shall be counted from 28 days prior to the date of submission of Tender.
- d) Completion certificates for works Issued by Private parties shall be Supported by TDS (Tax Deducted at Source) certificate.

6 Bidder's profile

The bidder shall provide the information in the below table:

SI.		ITEM		Details
No		ITEM		Details

1	Full name of bidder	
2	Full address, telephone numbers, fax numbers, and email address	
	of the primary office of the organization/main/head/corporate	
	office	
3	Name, designation, and full address of the Chief Executive Officer	
	of the bidder's organization, including contact numbers and email	
	Address	
4	Full address, telephone and fax numbers, and email addresses of	
	the office of the organization dealing with this tender	
5	Name, designation, and full address of the person dealing with the	
	tender to whom all reference shall be made regarding the tender	
	enquiry. His/her telephone, mobile, Fax and email address	
6	Bank Details (Bank Branch Name, IFSC Code, Account number)	
7	GST Registration number	

7 Schedule of Rates (SOR): The bidder should quote as per the enclosed Annexure- I

8 Evaluation Criteria:

- 8.1 The **Partner** who fulfills the Eligibility criteria shall be further evaluated against the criteria mentioned in Annexure- II as applicable.
- 8.2 RailTel reserves the right to accept or reject the response against this EOI, without assigning any reasons. The decision of RailTel is final and binding on the participants.
- 8.3 The RailTel evaluation committee will determine whether the proposal/ information is complete in all respects and the decision of the evaluation committee shall be final.

9 Payment terms

- 9.1 All payments shall be paid on back-to-back basis. RailTel shall make payment to selected Partner after receiving payment from Customer as per the Payment terms defined in the DRDO, Bangalore tender. In case of any penalty or deduction made by customer, same shall be passed on to partner if attributed to the Partner's portion of Scope.
- 9.2 For payment terms of DRDO, Bangalore, bidders are advised to go the respective section of DRDO, Bangalore Tender No. GEM/2024/B/5536311 DT: 12/11/2024 and all its associated corrigendum/ addendum/clarifications.

10 Service Level Agreement

The selected bidder will be required to adhere to the SLA matrix as defined in the DRDO, Bangalore Tender No. GEM/2024/B/5536311 DT: 12/11/2024 for his scope of work and the SLA breach penalty will be applicable proportionately on the selected bidder, as specified in the Tender. The SLA scoring and penalty deduction mechanism for in-scope of work area shall be followed as specified in the DRDO, Bangalore Tender. For payment terms of DRDO, Bangalore, bidders are advised to go to the respective section of DRDO, Bangalore Tender No. GEM/2024/B/5536311 DT: 12/11/2024 and all its associated corrigendum/addendum/ clarifications. Any deduction by Customer from RailTel payments on account of SLA breach which is attributable to Partner will be passed on to the Partner proportionately based on its scope of work.

11 Roles and Responsibility of the BA/SI Partner

The BA/SI will be responsible for the work of "IT Network Infrastructure revamp at stations & Depots of DRDO, BANGALORE "DRDO, Bangalore Tender No. GEM/2024/B/5536311 DT: 12/11/2024 and Corrigenda. The BA/SI should tightly integrate with OEM's solution providers and will provide manpower resources of this work. BA/SI should have sufficient backup support required for liasoning, meetings, coordination to meet the timelines of the project and its successful completion. The BA/SI shall nominate technical SPOC and account manager for this project.

The BA/SI should thoroughly study the RFP and Corrigendum floated by DRDO, Bangalore for compliance (enclosed).

- A. Documentation: BA/SI shall prepare High Level Design doc (HLD) and Low-Level Design doc (LLD) as part of implementation of the project under EoI. Bidder shall be responsible for all the documentation/ reports required at various stages of project during the currency of the project.
- B. Compliances: BA/SI shall be responsible for all the regulatory compliances related to fulfilment of delivery of this project under this EoI during its currency.

Above requirements are only indicative in nature and are only guidance of the bidder to assess the quantum of work. The BA/SI is required to apply their expertise to fulfil the required objective. In case of any discrepancy/typo-graphical error mentioned in this EoI then the conditions/specifications mentioned in the RFP & Corrigendum floated by DRDO, BANGALORE, will prevail.

C. Governance Framework:

- RailTel will setup a governance team comprising of RailTel & BA/SI. The team will have minimum of 2 member each from RailTel and BA/SI lead by GM/RailTel/SC. The team size may increase if required based on approval of Competent Authority of RailTel.
- BA/SI shall deploy competent & experiences persons to be part of the governance team.
- The BA/SI shall comply with all the ITIL processes and shall be responsible for its implementation across the various activities and deliverables against the scope of the project.
- The BA/SI shall adhere to the governance framework put in by RailTel for the project deliverables.
- The Governance team among the other things will monitor the performance of the project and take corrective measures as required for successful delivery of the project.

The Governance Team shall be overseeing the coordination, periodical reviews, escalations, billing, documentation, customer interactions etc.

12. Arbitration

The parties through respective signatories shall settle any dispute or disagreement with respect to performance, non-performance, or defective performance of respective obligation amicably. In the event of disputes remaining unresolved, the parties shall refer the matter to a single arbitrator under arbitration law that may be applicable, whose appointment shall be done by CMD, RailTel Corporation of India Limited. The place of arbitration shall be New Delhi and the language used shall be English.

13. Force Majeure Clause

If at any time, during the continuance of this contract, the performance, in whole or part, by either party, of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, Civil Commotion, Sabotage, Fires, Floods, Earthquakes, explosions, strikes, epidemics, quarantine restrictions, lockouts, any statute, statutory rules/regulations, order of requisitions issued by any Government Department or Competent Authority of acts of God (here-in-after referred to as event)then provided notice of the happening of any such event is given by either party to the other within twenty one days from the date of occurrence thereof, neither party shall, by reason of such event, be entitled to terminate this Contract nor shall either party have any claim for damage against the other in respect of such non-performance or delay in performance, and the obligations under the Contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, PROVIDED FURTHER that if the performance in whole or part of any obligation under this Contract is prevented or delayed by reason of any such event beyond a period as mutually agreed to by the RailTel and the Contract or after any event or 60days in the absence of such an agreement which ever is more, either party may at its option terminate the Contract provided also that if the contract is so terminated under this clause the RailTel may at the time of such termination take over from the Contractor at prices as provided for in the contract, all works executed or works under execution.

14. Integrity pact:

- a) RailTel (RCIL) has adopted Integrity Pact Program and for implementation thereof all tenders relating to procurement of OFC, quad cable, prefab shelters, electronic equipment's, and its installation and/or commissioning etc. and other item(s) or activity/activities proposed to be carried out or required by the Company for the value exceeding Rs. 15 crores at a time including for repair and maintenance of cable/network and any other items required for special works assigned to RailTel (RCIL) will be covered under the Integrity Pact Program and the vendors are required to sign the IP document and submit the same to RailTel (RCIL) before or along with the bids.
- b) Only those vendors who have purchased the tender document and signed the IP document can send their grievances, if any, to the Independent External Monitors (IEMs) through the nodal officer, GM (Admin & Security)/CO RailTel.

Name of IEMs and contact details:

- i) Smt. Vijaya Kanth, IRAS (Retd), Sterling Manor, Flat F, No. 5/6, Flat F, Sterling Manor, 3rd Cross Street, Sterling Road, Nungambakkam, Chennai-600034. E-Mail: vkanthmrl2003@yahoo.com, M.No. +91-9445868314
- ii) Shri. Vinayaka Rao Turaga, IOFS (Retd), TURAGA House, Anne Baburao Colony, Penamaluru Vijayawada, Andhra Pradesh-521139. E-Mail: tvrao56@gmail.com, M.No. +91-9007723424
- c) If the order, with total value equal to or more than the threshold value, is split to more than one vendor and even if the value of PO placed on any/each vendor(s) is less than the threshold value, IP document having been signed by the vendors at bid stage itself, the Pact shall continue to be applicable.
- d) Bidder of Indian origin shall submit the Integrity Pact (in 2 copies) on a non-judicial stamp paper of Rs. 100/- duly signed by the person signing the bid. If the bidder is a

partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.

- e) Bidder of foreign origin may submit the Integrity Pact on its company's letterhead, duly signed by the person signing the bid.
- f) The 'Integrity Pact' shall be submitted by the Bidder duly signed in all pages along with the Bid in a separate envelope, duly superscripted with 'Integrity Pact'. Tender received without signed copy of the Integrity Pact document will be liable to be rejected. Proforma for signing the Integrity Pact is available in Chapter-6 of this tender document (Form No. 6).
- g) One copy of the Integrity Pact shall be retained by RailTel (RCIL) and the 2nd copy will be issued to the representative of the bidders during bid opening. If the Bidders representative is not present during the Bid opening, the 2nd copy shall be sent to the bidder by post/courier.
- h) The Integrity Pact is applicable in this tender vide CVC circular no. 10/05/09 dt.18.05.09 and revised guideline of CVC circular no. 015/VGL/091 dt. 13.01.17 or the latest updated from time to time shall be followed.

The bidder shall submit the signed Integrity Pact (2 Copies) as per Annexure - XI

Note:

- 1) All the terms & conditions of DRDO, Bangalore including Scope of work, ITT, GTC, Payments, SLA & Penalties, warranty etc., shall be complied with by all bidders and applicable on back-back basis with the successful partner. Entire work shall be completed in all respects within 06 months from the date of issue of LoI/LoA/PO/SO from this office.
- 2) The tender document of DRDO, Bangalore is placed at the end of this Eol.
- 3) All the documents must be submitted with proper indexing with page numbers & signed.



Annexure - I: Schedule of Requirement & Technical specification

Name of Work:

"SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT:

1. LRDE (MAIN SITE)

	LRDE (MAIN SITE)		
Sl No	Item Description	Qty	Units
1	Dome Camera – Indoor with Pendant pipe mount & Interface plate	13	Nos
2	Dome Camera – Outdoor with Pendant, Pipe , Mount, Interface plate	2	Nos
3	Bullet Camera – Indoor	63	Nos
4	Bullet Camera - Outdoor with Pole Mount & Power Adapter	59	Nos
5	PTZ Camera – Indoor with surveillance cabinet 230VAC & Pendant pipe mount	7	Nos
6	PTZ Camera – Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230VAC	20	Nos
7	Multi Imager Camera-Outdoor with Pendant pipe mount & Interface plate	3	Nos
8	Server / Storage with VMS 256 Channel "All-in-One recording, viewing and management solution for 170 Nos Network Surveillance Camera & Expandable Up to 256 channels, Recording of all cameras at resolution @ 15 FPS for 90 days of recording."	2	Nos
9	VMS Software Licenses for 170 Cameras	1	Nos
10	CAT6 Armoured Cable	6000	Mtrs
11	12 Core OFC Armored Cable Single Mode	7000	Mtrs
12	6/8 Port LIU	29	Nos
13	24 Port LIU	5	Nos
14	Junction Box with Accessories	41	Nos
15	Electrical Gang Box	41	Nos
16	PDU 5 Amps	41	Nos
17	8 Port PoE + Industrial Switch with LR Module	28	Nos
18	24 Port PoE + Switch with LR Module	4	Nos
19	24 Port SFP L3 Switch with RPS - Connectivity with LR Modules (16 Nos)	2	Nos

20	24 Port Gigabit L3 Switch with RPS - Connectivity with SR Module (2 Nos) & LR Module (2 Nos)	2	Nos
21	Single Mode Media Convertor with Adapter	10	Nos
22	OFC Patch Chord - LC-LC	65	Nos
23	CAT6 Patch Chord - 5 Mtrs	80	Nos
24	CAT6 Patch Chord - 3 Mtrs	10	Nos
25	CAT6 Patch Chord - 1 Mtrs	36	Nos
26	Pole – 6 Mtrs	50	Nos
27	Lighting Arresters	50	Nos
28	Earth Pits	25	Nos
29	Earth Cable Insulated / Strip - Copper	7000	Mtrs
30	55 inch Display	11	Nos
31	Workstation (24 Core /128GB / 512GB SSD x 2 Nos/ RTX4000 / Win 11)	8	Nos
32	Joystick for Camera Control	2	Nos
33	Door Access Control System (Face Biometric Reader with EM Lock & Push Button)	1	Nos
34	9U Rack with Accessories	12	Nos
35	42 U Rack (800mmx 100 <mark>0 mm)</mark>	2	Nos
36	3 Core Armoured Power Cable 2.5sqmm	4600	Mtrs
37	3 Core Unarmoured Power Cable 2.5sqmm	1000	Mtrs
38	6 KVA UPS with 2 Hrs Backup	4	Nos
39	1 KVA UPS with 30 Minutes Backup	12	Nos
40	PVC Pipe	3000	Nos
41	HDPE Pipe	7000	Mtrs
42	GI pipe	500	Mtrs
43	Single Pole Surge Protector	41	Nos
44	Ethernet(LAN) Surge Protector	170	Nos
45	Cable Route Markers	60	Nos
46	Industrial Flexible 1/2 inch hoses	3000	Mtrs
47	OFC and Power cable Clamping with L angle & U clamps	1	Lot
48	Digging-Soft Soil (Bricks and Sand)	2000	Mtrs
49	Digging-Hard Soil (Bricks and Sand)	1000	Mtrs
50	Adjustable Ladder with seat extendable upto 10m	1	Nos
51	OFC Splicing	1000	Nos
52	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges.	M I	Lot
53	Resident Engineer- During Warranty Period (1 Engineer)	3	Year

54	Comprehensive AMC of 4 years after 3 years warranty	1	Lot

2. S1-SITE (LRDE), YELAHANKA

S1-SITE (LRDE), YELAHANKA			
Sl No	Sl No Item Description		Units
1	Bullet Camera-Outdoor with Pole Mount & Power Adapter	10	Nos
2	Dome Camera – Outdoor with Pendant pipe mount & Interface plate	2	Nos
3	PTZ Camera-Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230 VAC	5	Nos
4	Server / Storage "All-in-One recording, viewing and management solution for 17 Nos Network Surveillance Camera & expandable Up to 256 channels, Recording of all cameras at resolution @ 15 FPS for 90 days of recording"	1	Nos
5	VMS Software Viewing License for 17 Cameras	1	Nos
6	CAT 6 Armored Cable	1500	Mtrs
7	12 Core OFC Armored Cable Single Mode		Mtrs
8	6/8 Port LIU	10	Nos
9	24 Port LIU	2	Nos
10	Junction Box with Accessories	10	Nos
11	Electrical Gang Box	10	Nos
12	PDU 5 Amps	10	Nos
13	8 Port PoE + Industrial Switch with LR Module	6	Nos
14	8 Port Switch with SR Module	1	Nos

15	24 Port SFP L3 Switch with RPS - Field Connectivity with LR Modules (16 Nos) & SR Modules (2 Nos)	1	Nos
16	OFC Patch Chord - LC-LC	22	Nos
17	CAT6 Patch Chord - 5 Mtrs	25	Nos
18	CAT6 Patch Chord - 3 Mtrs	6	Nos
19	Pole - 6 Mtrs for Bullet Camera	20	Nos
20	Pole - 6 Mtrs for PTZ Camera	5	Nos
21	Lighting Arresters	25	Nos
22	Earth Pits	11	Nos
23	Earth Cable Insulated /Strip - Copper	1500	Mtrs
24	55 inch Display	2	Nos
25	Workstation (24 Core /128GB / 512GB SSD x 2 Nos/ RTX4000 / Win 11)	1	Nos
26	42U Rack (800mm x 1000mm)	1	Nos
27	3 Core Armored Power Cable 2.5sqmm	1500	Mtrs
28	3 Core Unarmored Power Cable 2.5sqmm	300	Mtrs
29	6 KVA UPS with 2 Hrs Backup	1	Nos
30	HDPE Pipe	2000	Mtrs
31	Single Pole Surge Protector	10	Nos
32	Ethernet (LAN) Surge Protector	25	Nos
33	Cable Route Markers	20	Nos
34	Industrial Flexible 1/2 inch hoses	1000	Mtrs
35	OFC and Power Cable Clamping with L angle and U clamps	1	Lot
36	Digging - Soft Soil (Bricks and Sand)	700	Mtrs
37	Digging - Hard Soil (Bricks and Sand)	300	Mtrs
38	Digging - Road Cutting (Bricks & Sand)	100	Mtrs
39	Adjustable Ladder with seat extendable up to 10m	1	Nos
40	GI Pipe	100	Mtrs
41	OFC Splicing	250	Nos
42	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges		Lot
	KAILI	5	Ь

43	Comprehensive AMC of 4 years after 3 years warranty	1	Lot

3. **S2-SITE** (LRDE), RAJANKUNTE

S2-SITE			
Sl No	Item Description	Qty	Units
1	Bullet Camera- Outdoor with Pole Mount & Power Adapter	36	Nos
2	PTZ Camera- Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230 VAC	9	Nos
3	Server / Storage " All-in-One recording, viewing and management solution for 45 Nos Network Surveillance Camera & expandable Up to 256 channels, Recording of all cameras at resolution @ 15 FPS for 90 days of recording "	1	Nos
4	VMS Software Viewing License for 45 Cameras	1	Nos
5	CAT 6 Armored Cable	3000	Mtrs
6	12 Core OFC Armored Cable Single Mode	4000	Mtrs
7	6/8 Port LIU	14	Nos
8	24 Port LIU	2	Nos
9	Junction Box with Accessories	14	Nos
10	Electrical Gang Box	14	Nos
11	PDU 5 Amps	14	Nos
12	8 Port PoE + Industrial Switch with LR Module	10	Nos
13	8 Port Switch with SR Module	1	Nos
14	24 Port SFP L3 Switch with RPS - Connectivity with LR Modules (18 Nos) & SR Module (2 Nos)		Nos
15	OFC Patch Chord - LC-LC	30	Nos
16	CAT 6 Patch Chord - 5 Mtrs	45	Nos

17	CAT6 Patch Chord - 3 Mtrs	10	Nos
18	Pole - 6 Mtrs for Bullet Camera	36	Nos
19	Pole - 6 Mtrs for PTZ Camera	9	Nos
20	Lighting Arresters	45	Nos
21	Earth Pits	15	Nos
22	Earth Cable Insulated /Strip - Copper	2500	Mtrs
23	55 inch Display	3	Nos
24	Workstation (24 Core /128GB / 512GB SSD x 2 Nos/ RTX4000 / Win 11)	2	Nos
25	42U Rack (800mm x 1000mm)	1	Nos
26	3 Core Armored Power Cable 2.5sqmm	2500	Mtrs
27	3 Core Unarmored Power Cable 2.5sqmm	500	Mtrs
28	6 KVA UPS with 2 Hrs Backup	1	Nos
29	HDPE Pipe	4000	Mtrs
30	Single Pole Surge Protector	14	Nos
31	Ethernet(LAN) Surge Protector	45	Nos
32	Cable Route Markers	28	Nos
33	Industrial Flexible 1/2 inch hoses	3000	Mtrs
34	OFC and Power Cable Clamping with L angle and U clamps	1	Lot
35	Digging - Soft Soil (Bricks and Sand)	1000	Mtrs
36	Digging - Hard Soil (Bricks and Sand)	500	Mtrs
37	Adjustable Ladder with seat extendable up to 10m	1	Nos
38	OFC Splicing	400	Nos
39	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges	1	Lot
40	Comprehensive AMC of 4 years after 3 years warranty	C	Lot

	K-SITE (LRDE), KOLAR		
Sl. No.	Item Description	Qty	Units
1	Bullet Camera - Outdoor with Pole Mount & Power Adapter	63	Nos
2	PTZ Camera- Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230 VAC	55	Nos
3	Server / Storage with VMS 256 Channel in-one recording, viewing and management solution for 118 Nos network surveillance camera & expandable Up to 256 channels; Recording of all cameras at resolution @ 15 FPS for 90 days of recording"	2	Nos
4	Video Management Software - 118 Cameras	1	Nos
5	CAT 6 Armoured Cable	2000	Mtrs
6	12 Core OFC Armoured Cable Single Mode	16000	Mtrs
7	6 Core OFC Armoured Cable Single Mode	16000	Mtrs
8	6/8 Port LIU	71	Nos
9	12 Port LIU	8	Nos
10	24 Port LIU	16	Nos
11	Junction Box with Accessories	86	Nos
12	Electrical Gang Box	86	Nos
13	PDU 5 Amps	86	Nos
14	8 Port PoE + Switch loaded with LR Modules (2 Nos)	20	Nos
15	24 Port SFP Switch fully loaded with LR Modules	10	Nos
16	24 Port SFP L3 Switch with RPS Connectivity with LR Module (20 Nos)	1	Nos
17	24 Port Gigabit L3 Switch with RPS Connectivity with SR Module		Nos
	Single mode Media Convertor with Adaptor	60	Nos

19	OFC Patch Chord - LC-LC	200	Nos
20	CAT6 Patch Chord - 5 Mtrs	84	Nos
21	CAT6 Patch Chord - 3 Mtrs	20	Nos
22	Pole - 6 Mtrs	84	Nos
23	Lighting Arresters	86	Nos
24	Earth Pits	86	Nos
25	Earth Cable Insulated / Strip - Copper	7000	Mtrs
26	55 inch Display	6	Nos
27	Workstation (24 Core /128GB / 512GB SSD x 2 Nos/ RTX4000 / Win 11)	4	Nos
28	Joystick for Camera Control	2	Nos
29	Door Access Control System (Face Biometric Reader with EM Lock & Push Button)	1	Nos
30	9U Rack with Accessories	22	Nos
31	42U Rack (800mm x 1000mm)	1	Nos
32	3 Core Armoured Power Cable 2.5sqmm	18000	Mtrs
33	3 Core Unarmoured Power Cable 2.5sqmm	1000	Mtrs
34	6 KVA UPS with 2 Hrs Backup	3	Nos
35	1 KVA UPS with 30 Minutes Backup	22	Nos
36	PVC Pipe	3000	Nos
37	Single Pole Surge Protector	86	Nos
38	Ethernet(LAN) Surge Protector	95	Nos
39	Cable Route Markers	400	Nos
40	HDPE Pipe	32000	Mtrs
41	GI Pipe	1000	Mtrs
42	OFC And Power Cable Clamping with L angle and U clamps	1	Lot
43	Industrial Flexible 1/2 inch hoses	5000	Mtrs
44	Digging - Soft Soil (Bricks and Sand)	3000	Mtrs
45	Digging - Hard Soil (Bricks and Sand)	2000	Mtrs
46	Adjustable Ladder with seat extendable up to 10m		Nos
46			

48	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories , Testing & Commissioning, Training & Documentation charges	1	Lot
49	Comprehensive AMC of 4 years after 3 years warranty	1	Lot

Note: It is advised to visit the site and to get acquainted with the site conditions before quoting for the subject work.



Annexure- II: Evaluation Process

- (i) All the bidders who fulfil the minimum eligibility conditions of this EOI shall be further evaluated on the price quoted and the selection of partner will be done on L1 (Lowest bid) basis.
- (ii) The evaluation shall be inclusive of quoted GST rates and bidder will be under obligation for quoting/charging correct rate of tax as prescribed under the respective Tax Laws. "GST rates as applicable, Vendor should furnish break up of GST rate" for items
- (iii) The bidders are required to quote as per the BoQ attached in the tender and upload the same.
- (iv) Blank or omitted items will be considered 'Nil' and treated as having Zero value. However, bidder is bound to provide all items as per the BoQ as per the terms and conditions of this EOI and DRDO, BANGALORE tender, without any extra cost to RailTel.
- (v) In the annexure I the bidders are requested to quote above/below/ at par for the percentages for each of the line item. The offer will be considered for all the line items put together as a whole and not as per the individual item wise.
- (vi) Rates quoted against each schedule in above should be inclusive of basic rate, including GST, Freight, Insurance, all taxes and any other charges or cost quoted by the tenderer.
- (vii) The engineer in charge can change i.e. add or delete or modify the location/ station/ Quantity/ materials as per the Railway requirement during the execution of the work. Detailed Technical specification are given in the Tender document.
- (viii) The bidders are required to meet all eligibility criteria mentioned in this tender document and financial bids of eligible bidders will be opened.
- (ix) Non- conformities between Figures and Words If there is a discrepancy between words and figures, the amount in words shall be prevail.
- (x) Priority, if any, for selection of partner will be provided as per RailTel's Business Associates policy and Agreed terms of Empanelment LOI/Agreement.



Annexure-III: Bid Security Declaration Form

(To be submitted on the Firm Letter Head)

Da	ate:	Tender No.	
To,			

RailTel Corporation of India Ltd.

No-6/1, 12th Main, Opp-Mount Carmel College, Vasanthnagar, Bangalore 560052

Sub: SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

I/We understand that, according to tender conditions, bids must be supported by a Bid Securing Declaration.

- a) I/We accept that I/We may be disqualified from bidding for any contract with RailTel for a periodof three (3) year from the date of notification if I am/We are in a breach of any obligation under the bid conditions, made misleading or false representations in the forms, statements and attachmentssubmitted in proof of the qualification requirements;
- b) If the bid is withdrawn or varied or modified in a manner not acceptable to the Employer during the validity or extended validity period duly agreed by the Bidder.
- c) Any effort by the Bidder to influence the Employer on bid evaluation, bid comparisonor contract award decision.
- d) Fail to commence the work on the specified date as per LOA/Work order and/or. sign the Agreement AND / OR furnish the required Performance security.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name a	nd capacity are shown)			
in the capacity of (insert legal capacity of person signing the Bid Securing				
Declaration)				
Name: (insert complete name of person signing the	e Bid Securing Declaration)			
Duly authorized to sign the bid for an on behalf of	(insert complete name			
of Bidder)Dated on_day of	(insert date of signing)			
Corporate Seal (where appropriate)				



Annexure IV: Format for COVERING LETTER

(To be submitted on the Firm's Letter Head)

Eol Reference No:	Date:
Edi Reference No.	Dutc.

To,

RailTel Corporation of India Ltd.

No-6/1, 12th Main, Opp-Mount Carmel College, Vasanthnagar, Bangalore 560052

Sir/Madam,

Subject: UPGRADATION OF CCTV SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

Reference: Tender No: GEM/2024/B/5536311 DT: 12/11/2024

We, the undersigned bidder/s, having read and examined in detail all the bidding documents in respect to the RFP for procurement of firewall, do hereby propose to provide our services as specified in Tender.

Technical Response

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

Deviations

We declare that all the services shall be performed strictly in accordance with the bid documents and there are no deviations from the requirements mentioned in this RFP

Performance Bank Guarantee

We hereby declare that in case the contract is awarded to us, we shall submit the contract performance bank guarantee in the form prescribed in the RFP.

Validity of this Bid

We agree to abide by this tender response for a period of 180 days after the date of opening of bids prescribed by the DRDO, BANGALORE and it shall remain binding upon us with full force and virtue, until, within this period, a formal contract is prepared and executed. This tender response, together with your written acceptance thereof in your notification of award, shall constitute a binding contract between us and DoT.

We undertake, if our proposal is accepted, to adhere to the implementation plan for the Proposed System at DoT put forward in RFP or such adjusted plan as may subsequently be mutually agreed between us and DoT or its appointed representatives.

We also hereby declare that information furnished in this Tender is true, complete and correct to the best of my knowledge and belief. I undertake that in the event of any information being found false or incorrect at any stage, my bid shall be liable to be cancelled/ terminated without any notice or compensation in lieu thereof along with any legal proceedings.

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

We understand that our bid is binding on us and that you are not bound to accept a Bid you receive.

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

W	herehv	submit FMD	amount of Rs.	issued vide	from Bank	
* * *	- 1101001	JUDITIC LIND	annount of its.	133UCU VIUC	II OIII Daiik	

Thanking you, Yours faithfully

(Signature of the Authorized signatory)

Name :

Designation : Phone No. :

Email id :

Date :

Authorized Signatory Name & Designation



Annexure V: Format for Self-Certificate & Undertaking

Self-Certificate (To be on company letter head)

Eol Reference No: RailTel/SR/SBC/DRDO-CCTV; Dt. 28/02/2025

To,

RailTel Corporation of India Ltd.

No-6/1, 12th Main, Opp-Mount Carmel College, Vasanthnagar, Bangalore 560052

Dear Sir,

Sub: Self Certificate for Tender, Technical & other compliances

- 1) Having examined the various Technical specifications in the EOI, we hereby confirm that we meet all specification.
- 2) We ______ agree to abide by all the technical, commercial & financial conditions of the DRDO, BANGALORE Tender No. GEM/2024/B/5536311 DT: 12/11/2024 pertaining to the portion against which the we have quoted in this EOI on back-to-back basis. We understand and agree that RailTel shall release the payment to selected partner after the receipt of corresponding payment from end client DRDO, BANGALORE by RailTel. Further we understand that in case selected partner fails to execute assigned portion of work, then the same shall be executed by RailTel through third party or departmentally at the risk and cost of selected partner.
- 3) We agree to abide by all the technical, commercial & financial conditions of the DRDO, BANGALORE Tender No. GEM/2024/B/5536311 DT: 12/11/2024 pertaining to the portion against which the bidder has quoted in this EOI on back-to-back basis.
- 4) We hereby agree to comply with all OEM technical & Financial documentation including MAF, Technical certificates/others as per end to end requirement mentioned in the DRDO, BANGALORE Tender No. GEM/2024/B/5536311 DT: 12/11/2024 pertaining to the portion against which the bidder has quoted in this EOI. We are hereby enclosing the arrangement of OEMs against each of the BOQ item quoted as mentioned DRDO, BANGALORE Tender No. GEM/2024/B/5536311 DT: 12/11/2024 pertaining to the portion against which the bidder has quoted in this EOI.
- 5) We hereby undertake to work with RailTel as per DRDO, BANGALORE tender terms and conditions. We confirm to submit all the supporting documents constituting/ in compliance with the Eligibility Criteria as required in the DRDO, BANGALORE terms and conditions like technical certificates, OEM compliance documents.

Authorized Signatory Name & Designation

Annexure-VI: Details of the Bidder

SI. No.	Particulars	Details		
1.	Name of the Bidder			
2.	Address of the Bidder			
3.	Status of the Company (Public Ltd/ P	/t. Ltd)		
4.	Details of Incorporation of the Compa	ny	Date:	
			Ref. #	
5.	Details of Commencement of Business		Date:	
			Ref. #	
6.	Valid GST no.			
7.	Permanent Account Number (PAN)			
8.	Name & Designation of the contact person to whom all references shall be made regarding this tender			
9.	Telephone No. (with STD Code)			
10.	E-Mail of the contact person			
11.	Mobile No. of the contact person			
12. Website				
13.	Financial Details (as per audited Balance Sheets) (in Cr)			
14.	Year 2021-2022	2022-2023	2023-2024	
15.	Net Worth			
16.	Turn Over			
17.	PAT			

Annexure- VII:

(To be executed on Non-Judicial Stamp Paper of Rs.100/-)

FORMAT OF POWER OF ATTORNEY (in original)

In favour of signato	ory/s to the	Tender, duly a	uthenticated by	Notary Public.

POWER OF ATTORNEY IN FAVOUR OF (Name, Designation, Company name)
TO ALL TO WHOM THESE PRESENTS shall come, I, (Name & address of the authorized person to subdelegate/delegate powers, delegated on him by the Board of Directors) do hereby sub-delegate/delegate, in term of the powers delegated to me by the Board of Directors,
powers, delegated on him by the Board of Directors), do herebyauthorize and empower Shri (name designation & address of the Attorney) to do severally amongst others, for the purpose of carrying on our business the following:
a) To represent lawfully the (name of the Co.) for obtaining bid/tenderdocuments prepare, sign, execute and submit tenders for execution of "SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT
b) To discuss the technical and financial matters, negotiate and accept prices and taked decisions regarding terms and conditions and sign agreements and contracts and also to bind the (name of the Co.) to the arbitration clause included in the contract.
C) For all or any of the purposes here of to sign and deliver or otherwise execute such deed or deeds, transfer or transfers, endorsement or endorsements and toperform such other acts, matters, things as the Attorney shall consider requisiteor advisable as full and effectively as the Company could do, if present and acting there.
I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by the Board of Directors) in terms of the powers delegated to me by the Board of Directors of (name of the Co.), do hereby agree that all acts, deeds and things done by the said Attorney by virtue of this
power of attorney, shall be construed asacts, deeds and things done by the Company.
I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by
the Board of Directors), further undertake to ratify and confirm whatever our said attorney shall do
or cause to be done for the Company, the said Company, in the premises, by virtue of the powers hereby given.
WHEREAS, this sub-delegation is signed and delivered to Shri (name & designation of the Attorney), on thisday of, 20 (Twothousand).

day of

WHEREAS, even though this sub-delegation is signed on this_

and receives this delegation.
IN WITNESS WHEREOF, I, (Name & address of the authorized person to sub- delegate/delegate powers,
delegated on him by the Board of Directors) has, this day
of
signature unto this instrument.
SIGNED AND DELIVERED ON
BY
(Name of authorized person to delegate powers)
WITNESS:
SIGNED AND RECEIVED ON
BY
(Name & designation of Attorney)



Annexure - VIII Turnover Details

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the annual turnover furnished by << COMPANY NAME >> for last 5 years

Financial year	Total Turnover, Net worth, Profit & Loss Statement of the Company (Rs.)
2019-20	
2020-21	
2021-22	
2022-23	
2023-24	

This is as per the Statement of Accounts which has been duly verified by me and found correct.

Place:

Date:		
		Seal & Signature of
		Chartered Accountant



Annexure- IX: Format for Undertaking on Litigation(s)

(To be submitted in firm/ company letter head)

This is to certify that << COMPANY NAME >> is not involved in any litigation that may have an impact of affecting or compromising the delivery of services as required under this RFP.

We also hereby declare that information furnished in this Tender is true, complete and correct to the best of my knowledge and belief. I undertake that in the event of any information being found false or incorrect at any stage, my bid shall be liable to be cancelled/ terminated without any notice or compensation in lieu thereof along with any legal proceedings against.

Thanking you, Yours faithfully

(Signature of the Authorized signatory)



Annexure-X: Non-Disclosure Agreement (NDA) Format

CONFIDENTIAL AND MUTUAL NON- DISCLOSURE AGREEMENT

THIS A	GREEMENT MADE ON THISDAY OF, 2020 AT
	BETWEEN
(Hereir	a company incorporated in India under the provisions he Companies Act, 1956 and having its Registered Office at nafter referred to as "Company") represented by its Managing Director / CEO Mr./Msduly authorized for the same which expression shall unless repugnant to the ng or context thereof be deemed to mean and include, its Directors, affiliates, successors and
	ted assigns of the FIRST PART
AND	
Railwa office Delhi- CS Mr	el Corporation of India Limited, is a Government of India undertaking under the Ministry of ays duly incorporated under the provisions of the Companies Act, 1956 and having its registered and Corporate office at Plat-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New 110023 (hereinafter referred to as "RailTel"), represented by Dy. General Manager/Law & J.S. Marwah duly authorized for the same which expression shall mean and include unless nant to the context, its successors, representative and permitted assigns of the SECOND PART
WHER	REAS
Α.	Company is poised to provide services to for project.
	project.
В.	RAILTEL is a Public Sector Undertaking (PSU under the Ministry of Railways), setup interalia to exploit Indian Railway's large telecom infrastructure.
C.	COMPANY and RAILTEL are working-out/ negotiating a possible commercial and strategic business relationship (hereinafter Purpose).
D.	During the course of the above negotiations RAILTEL and COMPANY (including their affiliates may in conjunction with the purpose and for their mutual benefit, disclose to each other certain information being proprietary and/or of confidential nature, and/or RAILTEL and COMPANY may receive and share or be grant access by the other to such confidential and/or proprietary information which is considered trade secret, proprietary, confidential and/ or sensitive.
E.	The parties and its affiliates wish to ensure the protection and secrecy of their respective confidential information which may be disclosed, received or granted access to

by the other party and wish to reduce to writing, their agreement in this respect.

NOW THEREFORE in consideration of the mutual promises, covenants and representations recorded herein by the parties hereto and such additional promises and understanding as are hereinafter set forth, the parties agree as follows:

1) Definition

For the purpose of this agreement, the term 'Confidential Information' shall mean and include any information or data of a scientific, technical, commercial or financial nature disclosed by the Disclosing party to the Receiving Party or which is obtained by a party from the other whether in writing, pictorially, in machine readable form, on disc, mail or orally, or by any other means/ modes of disclosure and including without limitation any information contained in any written or printed document, hardware, firmware and software, information related to technology and business activities (including, but not limited to, communication systems, telecommunication, business outlooks, revenue, pricing, trade secrets), computer programs, software (including, without limitations, code, software output, screen displays, file hierarchies and user interfaces), formulas, data, inventions, techniques, technology, know-how, processes, ideas, (whether patentable or not), schematics, specifications, drawings, product designs, product plants, programming, services, strategies, third party confidential information, and corporate and personnel statistics, customer lists (potential or actual) and other customer-related information, supplier sales statistics, market intelligence, marketing, information, business working, subsidiaries, affiliates and other business strategies and other operations, parent, commercial information of a confidential nature.

- (a) The party disclosing the Confidential Information is referred herein to as "Disclosing Party" and the party to which such Confidential Information is disclosed is referred to herein as "Recipient Party".
- (b) "Affiliate" of the Party shall mean the Company or other person who or which is either controlled by the respective Party or who controls the respective Party or who or which is controlled by same person/ entity who controls the respective Party, either by way of significant shareholding, voting rights or technical collaboration whether directly or indirectly through its affiliate.
- Neither party shall be required to disclose any particular information (including but not limited to Confidential Information) to the other and disclosure of any such information shall be entirely voluntary and at the sole discretion of the parties and to the extent deemed necessary by it and is not intended to, and shall not, create any contractual or other relationship or obligation of any kind beyond the terms of this Agreement nor any provision or disclosure of information (including but not limited to Confidential Information) as contemplated hereunder, shall be construed as creating, conveying, transferring by one party on the other any rights, license or authority in or to the information provided. The parties hereto shall use the Confidential Information only for the limited purpose of exploring/ finalizing the possible business relationship between the parties hereto and for no other purpose whatsoever.
- 3) Both the parties acknowledge and understand that any exchange of confidential Information of any nature shall not commit or bind the other to enter into a contract or otherwise and

that neither party shall rely on any information provided by the other as a commitment or an inducement to act or not to act in any given manner. Further neither party shall be liable to the other in any manner whatsoever for any decisions, obligation, costs or expenses incurred, changes in business practices, plans, organization, products, services or otherwise of the other, as a result of this Agreement or any exchange of Confidential Information hereunder.

- Both the Parties agrees and undertake to regard and preserve as Confidential Information provided by each to the other or which may be disclosed, received or granted access to by either party or come to the knowledge of either party in any manner in connection with the negotiations for the possible business relationship.
- (a) In maintaining the Confidential Information hereunder both parties agree that they shall not, without first obtaining the written consent of the other, disclose or make available to any person, firm or enterprise, reproduce or transmit, or use (directly or indirectly) for its own benefit or the benefit of others, any Confidential Information save and except that either party may disclose any Confidential Information to its Directors, officers, employees, or advisors on a "need to know" basis to enable them to evaluate such "Confidential Information" in connection with the negotiation for the possible business relationship between the Parties hereto.
 - (b) Both parties shall ensure that the said employee(s) and / or the said person(s) shall maintain confidentiality with regard to the disclosed Confidential Information, if any, and shall issue two suitable instructions and/or get two suitable written undertakings or agreements executed to binds its employees and/or the said person(s) to the same obligations of confidence and safeguarding as the parties hereto and to adhere to the confidentiality/ non-disclosure terms contained in this Agreement.
 - (c) Save and except for the purposes mentioned in clause (a) above both parties further agree that neither party will part with/ disclose any "Confidential Information" received by it to any other person directly or indirectly nor make copy(s) or reproduce in any way (including without limitation store in any computer or electronic system any written material/ documents containing "Confidential Information" and such written material/ documents will be retained under strict confidentiality by the receiving party.
 - (d) Both parties further agree that the confidential information which may pertain to or touch upon any regulatory aspects and/or dealings of either party with any statutory / government/ related agencies/ bodies, whether the said information is received verbally or in writing, will not be disclosed in any manner, either directly or indirectly, to any other persons except to its Directors, employees or advisors on a strictly 'need to know' basis.
 - (e) Both parties further agree to exercise the same degree of care that it exercises to protect its own Confidential Information of a like nature from unauthorised disclosure, but in no event shall a less than reasonable degree of care be exercised by either party.
- 6) It is mutually acknowledged and agreed that information shall not be considered "Confidential Information" to the extent, that such information: (a) at the time of disclosure was in the public domain or (b) is already known to the receiving party free of any

confidentiality obligation at the time it is obtained from other party; or (c) after disclosure is or becomes publicly known or available through no wrongful act of the receiving party; or (d) is rightfully received from a third party without restriction or (e) is approved for release, disclosure, dissemination or use by written authorization from the Disclosing Party; or (f) is required to be disclosed pursuant to a requirement of a governmental agency or law so long as the parties provide each other with timely prior written notice of such requirement and provide all reasonable co-operation in regard to taking protective action against such disclosure requirement; or (g) is disclosed after expiry of 5 (five) years from the date of expiry or earlier termination of this agreement.

However, before any party discloses any Confidential Information under clause 6, either party (to the extent permitted by law) uses its best endeavour to:

- (a) Inform other party of any circumstances and the information that will be disclosed
- (b) Give the other party a copy of a legal opinion indicating that disclosure is necessary
- (c) consult with the other party as to possible steps including without limitation, protective orders, or other appropriate remedy to avoid or limit disclosure and take those steps where they would not result in significant adverse consequences to the other party and
- (d) Gain assurances as to the confidentiality from the body to whom the information is to be disclosed.

If either party is unable to inform the other party before confidential information is disclosed, it will (to the extent permitted by law) inform the other party of the full circumstances of the disclosure and information that has been disclosed immediately after disclosure.

- 7) Both parties further agree and undertake not to disclose the information marked "Confidential Information" of the other to their agents or contractors without prior written approval from the other and without having first obtained from each agent or contractor a separate written agreement or undertaking binding them to the same obligations of confidence and safeguarding.
- 8) The parties further recognize that it may be necessary or appropriate for COMPANY to disclose Confidential Information to other Group Companies not named herein. For this purpose, COMPANY guarantees the observance and proper performance of other Group Company to whom Confidential Information is disclosed as above, of the terms and conditions of this agreement.
- 9) Both parties further agree to indemnify and keep indemnified each other against all actual loss and damage which the Disclosing Party may suffer because of any breach of this agreement by the Recipient Party of the Confidential Information. Always provided that
 - a. the Disclosing Party shall forthwith give written notice to the recipient Party of the loss and damage; and

- b. the Recipient Party shall be furnished with satisfactory documentary evidence of such actual loss and damage.
- Both parties further agree that upon termination/ expiry of this Agreement or at any time during its currency, at the request of the Disclosing Party the Recipient Party shall promptly (and in any case, within 15 days of request), deliver to the Disclosing Party all copies of the Confidential Information in its possession or under its direct or indirect control or shall destroy all memoranda, notes and other writings prepared by the recipient party or its affiliates, Directors, officers, employees or advisors to the extent the same are based on the confidential information with a written statement to the effect that upon such return the Receiving Party has not knowingly retained in its possession or under its control, either directly or indirectly, any Information or copies of such (other than Confidential Information embedded in the Receiving Party's records).

The confidentiality obligations set out herein above shall survive any such return or destruction of Information. Further The provisions set out herein above shall not apply to copies of electronically exchanged Information made as a matter of routine information technology backup and to Information or copies thereof which must be stored by the receiving Party, its Affiliates or its advisers according to provisions of mandatory law, provided that such Information or copies thereof shall be subject to an indefinite confidentiality obligation according to the terms and conditions set forth herein.

- 11) Both parties acknowledge that the confidential information coming to the knowledge of the other may relate to and/or have implications regarding the future strategies, plans, business activities, methods, processes and or information of the parties which afford them certain competitive and strategic advantage. Accordingly neither party will use the confidential information or strategies, plans, business activities, methods, process, information, and /or competitive and strategic advantage to the other.
- 12. Each party understands that the other party may currently or in the future be developing information internally, or receiving information from third parties that may be similar to the "confidential Information" Accordingly, nothing in this agreement will be c construed as a representation or inference that either party will not develop products, or have products developed for it, or enter into joint ventures, alliances, or licensing arrangements that, without violation of this agreement, compete with the products or systems embodying the "confidential Information".
- 13. Except as specifically provided herein, disclosure of confidential information by either party pursuant hereto shall not be deemed to grant to the Recipient party, any rights, interest or property in such confidential information and accordingly both parties agree that they will not directly or indirectly claim or submit any application for grant of any patent, copyright, design right or other intellectual property Rights in, to or on the basis of the confidential information.
- 14. The parties hereto acknowledge and agree that in the event of a breach or threatened breach by the other of the provisions of this Agreement, the party not in breach will have no adequate remedy in money or damages and accordingly notwithstanding anything contained in clause 18 hereof, the party not in breach shall be entitled to injunctive relief against such

breach or threatened breach by the party in breach: provided, however, no specification in this confidentiality Agreement of a specific legal or equitable remedy shall be construed as a waiver or prohibition of any other legal or remedies in the event of a breach or threatened breach of this Agreement and the remedies specified herein shall be in addition to all other reliefs and remedies available to the parties under prevailing laws.

- 15. No failure or delay be either party in exercising or enforcing any right, remedy or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise or enforcement of any right, remedy or power preclude any further exercise or enforcement of any right, remedy or power preclude any single or partial exercise or enforcement thereof or the exercise or enforcement of any of any other right, remedy or power.
- 16. Each Party acknowledges that the other Party makes no representation or warranty as to the accuracy or completeness of any of the Information furnished by or on its behalf. Only those representations and warranties which are made in a final definitive agreement relating to the purpose of the disclosure of the Information will have legal effect.

Each party represents and warrants to the other that it is a corporation duly organised and validly existing in the jurisdiction of its incorporation. Each party represents that it has full corporate power and authority to enter into this Agreement and to do all things necessary for the performance of this Agreement. The Disclosing Party warrants that the Confidential Information has not been provided in breach of any other agreements having legal binding of any nature with the third party(s).

Unless documented and agreed otherwise in respect of any individual disclosure of Confidential Information, each party warrants that it will use its best endeavours to ensure that any Confidential Information it discloses or it intends to disclose to the other party under the provisions of this agreement is complete and accurate but PROVIDED ALWAYS that the disclosing party has exercised such best endeavours:

The parties acknowledge that:

- (a) such Confidential Information as is disclosed by the Disclosing party under this Agreement is accepted by the Receiving Party it at its own risk; and
- (b) it releases the Disclosing party from all claims, actions, and suits in relation to such Confidential Information (including its use under this Agreement).
- 17. This agreement will be governed by the laws of India and jurisdiction shall be exclusively vested in the courts at New Delhi, India only.
- 18. If any matter arises between the parties about this agreement, then the parties shall meet to discuss the matter and shall negotiate in good faith to endeavour to resolve the matter arising the matter, however.
 - a. If any matter arising has not been resolved by the parties within thirty (30) days after the date the party raising the matter gave notice of it to the other party: then
 - b. the matter shall be submitted by either party to Arbitration. Arbitration shall be held in New Delhi, India. The arbitration shall be conducted as per the provisions of Indian

Arbitration and Conciliation Act 1996 and any statutory modification or re-enactment thereof.

- c. Each party to the dispute shall appoint one Arbitrator each and the two Arbitrators shall appoint the third or the presiding Arbitrator. The arbitration proceedings shall be conducted in the English language. The courts of law at New Delhi, India alone shall have the jurisdiction. The arbitration award shall be final and binding upon the parties and judgement may be entered thereon, upon the application of either party to a court having jurisdiction.
- d. Each party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the parties unless the award otherwise provides.
- 19. This agreement shall not be assignable or transferable by either party without the written consent of the other party.
- 20. No license to a Party hereto, under any trademark, patent, copyright or any other intellectual property right, is either granted or implied by the conveying of Information to such party.
- 21. This agreement shall remain valid for a period of 3 (three) years from the date of execution of this Agreement which term may be extended by mutual consent in writing of both the parties. This agreement may be terminated by either party by giving 30 (thirty) days' notices in writing to the other party without assigning any reason whatsoever. However, the obligations of each party hereunder shall survive the termination or earlier determination or expiry of this Agreement and shall continue and be binding upon the parties irrespective of whether the discussion between the parties materialize into a specific understanding/business relationship or not for a further period of 5 (five) years after termination / expiry of the agreement.
- 22. All notices required by this Agreement shall be in writing, and shall be personally delivered, sent by registered post or by commercial courier, addressed as follows:

To Co	ompany:	Mr/Ms	
10 0	Jilipaliy.	1411 / 1412	

To RAILTEL:

Attn: Mr. J. S. Marwah

RailTel Corporation of India Limited, Plat-A, 6th Floor,

Office Block Tower-2, East Kidwai Nagar, New Delhi- 110023

Nothing in this provision shall be construed to prohibit communication by more expedient means, such as by telephone or facsimile transmission, to accomplish timely communication. However, to constitute effective notice, written confirmation of a telephone conversation or an original of

facsimile transmission must be sent by registered post, by commercial carrier, or handdelivered. Each party may change the address by written notice in accordance with this paragraph. Notices delivered personally shall be deemed communicated as of actual receipt; mailed notices shall be deemed communicated as of four days after mailing, unless such date is a date on which there is no mail service. In that event communication is deemed to occur on the next mail service day.

- 23. This agreement supersedes all prior discussions and writings with respect to the confidential information and constitutes the entire Agreement between the parties with respect to the subject matter hereof and no modifications of this Agreement or waiver of the terms and conditions hereof shall be binging upon either of the parties hereto, unless approved in writing by an authorizes representative of each party. In the event that any of the provisions of this Agreement shall be held by court or other Tribunal of competent jurisdiction to be unenforceable, the remaining portions hereof shall remain in full force and effect and this Agreement shall be interpreted and construed accordingly.
 - 24. This Agreement is executed in duplicate, each of which shall be deemed to be the original and both when sent together shall be deemed to form one and single document.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the date and year written above.

For RailTel Corporation of India Ltd.

Sign:	Sign:
Name:	Name:
Title:	Title:



Annexure - XI PROFORMA FOR SIGNING THE INTEGRITY PACT (On Stamp Paper of Rs. 100/-)

RailTel Corporation of India Limited hereinafter referred to as "The Principal".
And, here in after referred to as "The Bidder/ Contractor"
Preamble.
The Principal intends to award, under laid down organizational procedures, contract/s for
In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM),

Section 1- Commitments of the Principal

principles mentioned above.

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

who will monitor the tender process and the execution of the contract for compliance with the

No employee of the principal, personally or through family members, will in connection with the 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.

The principal will during the tender process treat all Bidder(s) with equity and reason. The Principal 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 process or the contract execution.

The Principal will exclude from the process all known prejudiced persons.

2. If the Principal 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 Principal 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 himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

The Bidder(s)/contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal'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 during tender process or during the execution of the contract.

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.

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

The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, 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 should be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers' as annexed.

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

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

Section 3: Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is annexed.

Section 4: Compensation for Damages

- 1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- 2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to be terminated the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5: Previous Transgression

- 1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti-corruption approach or with any other public sector enterprise in India that could justify his exclusion from the tender process.
- 2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process for action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6: Equal treatment of all Bidders / Contractors/Subcontractors.

- 1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2. The Principal will enter into agreements with identical conditions as this one with all bidders, contractors, and subcontractors.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7: Criminal charges against violation by Bidder(s) / Contractor(s) / Sub contractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8: Independent External Monitor / Monitors

- 1. The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, RailTel.
- 3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/Subcontractor(s) with confidentiality.
- 4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

- 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action, or tolerate action.
- 6. The Monitor will submit a written report to the CMD, RailTel within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 7. Monitor shall be entitled to compensation on the same terms as being extended to provide to Independent Directors on the RailTel Board.
- 8. If the Monitor has reported to the CMD, RailTel, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, RailTel has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 9. The word 'Monitor' would include both singular and plural.

Section 9: Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 10 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made / lodged by either party during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by CMD of RailTel.

Section 10: Other Provisions

- 1. This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
- 2. Changes and supplements as well as termination notices need to be made in writing.
- 3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & on behalf of the Principal) (Office Seal)	(For & On behalf of Bidder/Contractor) (Office Seal)
Place	
Date	
Witness 1:	
(Name & Address)	
Witness 2: (Name & Address)	



Annexure-XII: Past Performance details

SI.No	Description	Details by the tenderer	Remarks, If any
1	Name of the Work		
2	Value of the work		
3	Letter of Award No and Date		
4	Original Period of completion		
5	Extended period of completion		
6	Portion of work of IT / VideoCCTV System		
7	No of geographically dispersed locations in which work has been done for		
8	No of cities/ towns covered with the network under the above work		

It is certified that the IT Network Infrastructure under the above work has been done in federated.



Annexure- XIII: Undertaking for End of Support

Date:

To
RAILTEL CORPORATION OF INDIA LIMITED
No-6/1, 12th Main,
Opp-Mount Carmel College,
Vasanthnagar, Bangalore 560 052

Subject: End of Support Letter

Reference: Tender Number -

Madam/Sir,

We <OEM> ensure that the devices quoted <Device Name and Model> for the above referenced tender will not be declared end of Support for a period of 5 years from the date of Supply.

Thanking You

For < OEM> < (Authorized Signatory)>



Annexure- XIV - UNDERTAKING ON INDEMNIFICATION

We	(Bidders Name) hereby agree and undertake to indemnify, keep
indem	nifies, depended and hold harmless the RailTel & DRDO and its Officers against all
losses,	penalties, costs and expenses, duties of any kind whatsoever which mayarise on
accour	nt of breach un-authorized act, fraud deed or any other acts of ours or anyof our
person	nel. We hereby further agree and undertake to indemnify and keepindemnifies against
-	der passed by any execut <mark>ive, q</mark> uasi-judicial or <mark>judici</mark> al authoritywherein the Railtel &
	is compelled to obey the order which arise due to breach of contract by us.
We	(Bidders name) shall indemnify, protect and defend at ourown cost,
New M	langalore Port Authority and its agents & employees from & against any/all actions,
claims	, losses or damages arising out of;
i.	Any violation in course of execution of the contract of any legal provisions or any right
	of third parties.
ii.	Failure to exercise the skill and care required for satisfactory execution of the
	contract.
iii.	Shall indemnify DRDO against all claims for compensation by or on behalf of any
	workman employed by us in connection with the contract, for injury or death by
	accident under the Workman Compensation Act (Act VIII of 1923) as amended from
	time to time.
We	(Bidders name) shall be responsible for all commissionsand omissions
•	t of manpower engaged for the purpose. DRDO shall not be responsible in any manner
	pever, in matters of injury/death/health etc. of our employees performing duties under ntract.
the co	nti act.
We	(Bidders name) hereby undertake that ,
a.	The workforce deployed under this contract will be provided with all the necessary

- a. The workforce deployed under this contract will be provided with all the necessary safety gears and equipment for the job.
- b. Bidder/deployed staffs will follow all the required safety procedures while executing the job.

Sign and Seal of the Bidder/ Bidders Authorized representative



<u>Annexure- XV -</u> Financial Bid Format

Name of the work

"SITC OF CCTV SURVEILLANCE SYSTEM AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT".

1. LRDE (MAIN SITE)

LRDE (MAIN SITE)				SUPI	PLY	INSTALLATION		
Sl	ERDE (MINIVESTIE)			Unit Rate	Amount	Unit Rate	Amount	
No	Item Description	Qty	Units	(Rs)	(Rs)	(Rs)	(Rs)	
1	Dome Camera – Indoor with Pendant pipe mount & Interface plate	13	Nos	XXXX	XXXX	XXXX	xxxx	
2	Dome Camera – Outdoor with Pendant, Pipe, Mount, Interface plate	2	Nos	XXXX	XXXX	XXXX	xxxx	
3	Bullet Camera – Indoor	63	Nos	xxxx	XXXX	xxxx	XXXX	
4	Bullet Camera - Outdoor with Pole Mount & Power Adapter	59	Nos	xxxx	xxxx	XXXX	xxxx	
5	PTZ Camera – Indoor with surveillance cabinet 230VAC & Pendant pipe mount	7	Nos	XXXX	XXXX	XXXX	xxxx	
6	PTZ Camera – Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230VAC	20	Nos	xxxx	xxxx	XXXX	xxxx	
7	Multi Imager Camera-Outdoor with Pendant pipe mount & Interface plate	3	Nos	xxxx	XXXX	XXXX	xxxx	
8	Server / Storage with VMS 256 Channel "All-in-One recording, viewing and management solution for 170 Nos Network Surveillance Camera & Expandable Up to 256 channels, Recording of all cameras at resolution @ 15 FPS for 90 days of recording."	2	Nos	XXXX	xxxx	xxxx	XXXX	
9	VMS Software Licenses for 170 Cameras	1	Nos	XXXX	XXXX	XXXX	xxxx	
10	CAT6 Armoured Cable	6000	Mtrs	XXXX	XXXX	XXXX	xxxx	
11	12 Core OFC Armored Cable Single Mode	7000	Mtrs	XXXX	XXXX	xxxx	xxxx	
12	6/8 Port LIU	29	Nos	XXXX	XXXX	XXXX	XXXX	
13	24 Port LIU	5	Nos	XXXX	XXXX	XXXX	xxxx	

15 Electrical Gang Box	XXX XXX XXX XXX XXX
16 PDU 5 Amps	xxx xxx xxx xxx
17 8 Port PoE + Industrial Switch 28 Nos xxxx xxxx	xxx xxx xxx
with LR Module 4 Nos xxxxx xxxxx xxxxx xxxxx xxxx xxxxx <	xxx
Module	XXX
Connectivity with LR Modules (16 Nos)	
RPS - Connectivity with SR Module (2 Nos) & LR Module (2 Nos) Nos xxxx	XXX
with Adapter 22 OFC Patch Chord - LC-LC 65 Nos xxxxx	
23 CAT6 Patch Chord - 5 Mtrs 80 Nos xxxx xxxx<	xxx
24 CAT6 Patch Chord - 3 Mtrs 10 Nos xxxx xxxx xxxx x 25 CAT6 Patch Chord - 1 Mtrs 36 Nos xxxx xxxx xxxx x 26 Pole -6 Mtrs 50 Nos xxxx xxxx xxxx x 27 Lighting Arresters 50 Nos xxxx xxxx xxxx x	XXX
25 CAT6 Patch Chord - 1 Mtrs 36 Nos xxxx xxxx xxxx x 26 Pole -6 Mtrs 50 Nos xxxx xxxx xxxx x 27 Lighting Arresters 50 Nos xxxx xxxx xxxx x	XXX
26 Pole –6 Mtrs 50 Nos xxxx xxxx xxxx 27 Lighting Arresters 50 Nos xxxx xxxx xxxx	XXX
27 Lighting Arresters 50 Nos xxxx xxxx xxxx x	XXX
	XXX
20 Feedb Dita	XXX
28 Earth Pits 25 Nos xxxx xxxx xxxx x	XXX
29 Earth Cable Insulated / Strip - 7000 Mtrs xxxx xxxx xxxx xxxx x	XXX
30 55 inch Display 11 Nos xxxx xxxx xxxx x	XXX
31 Workstation (24 Core /128GB /	xxx
32 Joystick for Camera Control 2 Nos xxxx xxxx xxxx x	XXX
33 Door Access Control System (Face Biometric Reader with EM Lock & Push Button) 1 Nos xxxx xxxx xxxx xxxx xxxx xxxx xxxx	XXX
34 9U Rack with Accessories 12 Nos xxxx xxxx xxxx x	XXX
35 42 U Rack (800mmx 1000 mm) 2 Nos xxxx xxxx xxxx x	XXX
36 3 Core Armoured Power Cable 4600 Mtrs xxxx xxxx xxxx xxxx xxxx xxxx xxxx x	XXX
37 3 Core Unarmoured Power Cable 2.5sqmm 1000 Mtrs xxxx xxxx xxxx xxxx xxxx xxxx xxxx x	XXX
38 6 KVA UPS with 2 Hrs Backup 4 Nos xxxx xxxx xxxx x	XXX
39 1 KVA UPS with 30 Minutes 12 Nos xxxx xxxx xxxx x	
40 PVC Pipe 3000 Nos xxxx xxxx xxxx x	XXX
41 HDPE Pipe 7000 Mtrs xxxx xxxx xxxx x	xxx

42	GI pipe	500	Mtrs	xxxx	XXXX	XXXX	xxxx
43	Single Pole Surge Protector	41	Nos	xxxx	XXXX	XXXX	xxxx
44	Ethernet(LAN) Surge Protector	170	Nos	XXXX	XXXX	XXXX	XXXX
45	Cable Route Markers	60	Nos	XXXX	XXXX	XXXX	xxxx
46	Industrial Flexible 1/2 inch hoses	3000	Mtrs	XXXX	XXXX	XXXX	XXXX
47	OFC and Power cable Clamping with L angle & U clamps	1	Lot			xxxx	xxxx
48	Digging-Soft Soil (Bricks and Sand)	2000	Mtrs			xxxx	xxxx
49	Digging-Hard Soil (Bricks and Sand)	1000	Mtrs			xxxx	xxxx
50	Adjustable Ladder with seat extendable upto 10m	1	Nos	xxxx	xxxx		
51	OFC Splicing	1000	Nos			XXXX	xxxx
52	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges.	1	Lot			XXXX	XXXX
53	Resident Engineer- During Warranty Period (1 Engineer)	3	Year			xxxx	xxxx
	Total without AM	IC and	GST		XXXX		xxxx
54	Comprehensive AMC of 4 years after 3 years warranty	Lot	1	xxxx	xxxx	xxxx	xxxx
	Total CAM	C Cost			XXXX		xxxx
		Total	Value ex	cluding GST	XXXX		xxxx
				GST@18%	XXXX		XXXX
		Total	Value in	cluding GST	XXXX		xxxx

NOTE- Blank Cells need not be filled.

2. S1-SITE (LRDE), YELAHANKA

S1-SITE (LRDE), YELAHANKA				SUPPLY		INSTALLATION	
SI No	Item Description	Qty	Units	Unit Rate	Amount	Unit Rate	Amount
110				(Rs)	(Rs)	(Rs)	(Rs)
1	Bullet Camera-Outdoor with Pole Mount & Power Adapter	10	Nos	XXXX	XXXX	XXXX	XXXX
2	Dome Camera – Outdoor with Pendant pipe mount & Interface plate	2	Nos	XXXX	XXXX	XXXX	xxxx

3	PTZ Camera-Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230 VAC	5	Nos	xxxx	XXXX	xxxx	XXXX
4	Server / Storage "All-in-One recording, viewing and management solution for 17 Nos Network Surveillance Camera & expandable Up to 256 channels, Recording of all cameras at resolution @ 15 FPS for 90 days of recording"	1	Nos	XXXX	XXXX	XXXX	XXXX
5	VMS Software Viewing License for 17 Cameras	1	Nos	XXXX	XXXX	XXXX	XXXX
6	CAT 6 Armored Cable	1500	Mtrs	XXXX	XXXX	XXXX	XXXX
7	12 Core OFC Armored Cable Single Mode	1500	Mtrs	XXXX	XXXX	XXXX	XXXX
8	6/8 Port LIU	10	Nos	XXXX	XXXX	XXXX	XXXX
9	24 Port LIU	2	Nos	XXXX	XXXX	XXXX	XXXX
10	Junction Box with Accessories	10	Nos	XXXX	XXXX	XXXX	XXXX
11	Electrical Gang Box	10	Nos	XXXX	XXXX	XXXX	XXXX
12	PDU 5 Amps	10	Nos	XXXX	XXXX	XXXX	XXXX
13	8 Port PoE + Industrial Switch with LR Module	6	Nos	XXXX	XXXX	XXXX	XXXX
14	8 Port Switch with SR Module	1	Nos	XXXX	XXXX	XXXX	XXXX
15	24 Port SFP L3 Switch with RPS - Field Connectivity with LR Modules (16 Nos) & SR Modules (2 Nos)	1	Nos	xxxx	xxxx	xxxx	XXXX
16	OFC Patch Chord - LC-LC	22	Nos	XXXX	XXXX	XXXX	XXXX
17	CAT6 Patch Chord - 5 Mtrs	25	Nos	XXXX	XXXX	XXXX	XXXX
18	CAT6 Patch Chord - 3 Mtrs	6	Nos	XXXX	XXXX	XXXX	XXXX
19	Pole - 6 Mtrs for Bullet Camera	20	Nos	XXXX	XXXX	XXXX	XXXX
20	Pole - 6 Mtrs for PTZ Camera	5	Nos	XXXX	XXXX	XXXX	XXXX
21	Lighting Arresters	25	Nos	xxxx	XXXX	XXXX	XXXX
22	Earth Pits	11	Nos	XXXX	XXXX	XXXX	XXXX
23	Earth Cable Insulated /Strip - Copper	1500	Mtrs	XXXX	XXXX	XXXX	XXXX
24	55 inch Display	2	Nos	xxxx	XXXX	XXXX	XXXX
25	Workstation (24 Core /128GB / 512GB SSD x 2 Nos/ RTX4000 / Win 11)	1	Nos	xxxx	XXXX	xxxx	XXXX
26	42U Rack (800mm x 1000mm)	1	Nos	XXXX	XXXX	xxxx	XXXX
27	3 Core Armored Power Cable 2.5sqmm	1500	Mtrs	XXXX	XXXX	XXXX	xxxx
28	3 Core Unarmored Power Cable 2.5sqmm	300	Mtrs	XXXX	XXXX	XXXX	xxxx
29	6 KVA UPS with 2 Hrs Backup	1	Nos	XXXX	XXXX	XXXX	XXXX
30	HDPE Pipe	2000	Mtrs	XXXX	XXXX	XXXX	XXXX

31	Single Pole Surge Protector	10	Nos	xxxx	XXXX	xxxx	xxxx
32	Ethernet (LAN) Surge Protector	25	Nos	XXXX	XXXX	XXXX	XXXX
33	Cable Route Markers	20	Nos	XXXX	XXXX	XXXX	XXXX
34	Industrial Flexible 1/2 inch hoses	1000	Mtrs	XXXX	XXXX	XXXX	XXXX
35	OFC and Power Cable Clamping with L angle and U clamps	1	Lot			XXXX	XXXX
36	Digging - Soft Soil (Bricks and Sand)	700	Mtrs			XXXX	XXXX
37	Digging - Hard Soil (Bricks and Sand)	300	Mtrs			XXXX	XXXX
38	Digging - Road Cutting (Bricks & Sand)	100	Mtrs			xxxx	XXXX
39	Adjustable Ladder with seat extendable up to 10m	1	Nos	xxxx	xxxx		
40	GI Pipe	100	Mtrs	XXXX	XXXX	XXXX	XXXX
41	OFC Splicing	250	Nos			XXXX	XXXX
42	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges	1	Lot			XXXX	xxxx
	Total with <mark>out AM</mark> C	and G	ST		XXXX		XXXX
43	Comprehensive AMC of 4 years after 3 years warranty	1	Lot	xxxx	XXXX	xxxx	xxxx
	Total CAMC	Cost			XXXX		XXXX
		Total V	Value excl	luding GST	XXXX		XXXX
				GST@18%	XXXX		XXXX
		Total '	Value incl	luding GST	XXXX		XXXX
	NOTE- B	lank Ce	ells need n	ot be filled.			

3. S2-SITE (LRDE), RAJANKUNTE

S2-SITE (S2-SITE (LRDE), RAJANKUNTE		SUPPLY		PPLY	INSTALLATION	
Sl No	Item Description	Qty	Units	Unit Rate (Rs)	Amount (Rs)	Unit Rate (Rs)	Amount (Rs)
1	Bullet Camera- Outdoor with Pole Mount & Power Adapter	36	Nos	xxxx	xxxx	xxxx	xxxx
2	PTZ Camera- Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230 VAC	9	Nos	XXXX	XXXX	xxxx	XXXX

License for	ware Viewing 1 r 45 Cameras 300 FC Armored 400 le Mode U 14 U 2	1 Nos 3000 Mtrs 4000 Mtrs 14 Nos 2 Nos	xxxx xxxx xxxx	xxxx	xxxx	XXXX
6 12 Core Of Cable Sing 7 6/8 Port LIU 8 24 Port LIU 9 Junction Bo Accessories 10 Electrical C 11 PDU 5 Am 12 8 Port PoE Switch with 13 8 Port Swith Module 14 24 Port SFI RPS - Cont LR Module Module (2 OFC Patch 16 CAT 6 Patch Mtrs 17 CAT6 Patch 18 Pole - 6 Mt Camera 19 Pole - 6 Mt Camera 20 Lighting At	FC Armored dole Mode U 14 U 2	4000 Mtrs 14 Nos	+ +	XXXX		MAAA
Cable Sing	U 14 U 2	14 Nos	XXXX		XXXX	XXXX
8 24 Port LIU 9 Junction Both Accessories 10 Electrical Content of Electri	J 2			xxxx	xxxx	XXXX
9 Junction Bot Accessories 10 Electrical C 11 PDU 5 Am 12 8 Port PoE Switch with 13 8 Port Switch Module 14 24 Port SFI RPS - Conn LR Module Module (2 15 OFC Patch 16 CAT 6 Patch Mtrs 17 CAT6 Patc 18 Pole - 6 Mt Camera 19 Pole - 6 Mt Camera 20 Lighting At		2 Nog	XXXX	XXXX	XXXX	XXXX
Accessories 10 Electrical C 11 PDU 5 Am 12 8 Port PoE Switch with 13 8 Port Switch with Module 14 24 Port SFI RPS - Cont LR Module Module (2 15 OFC Patch 16 CAT 6 Patch Mtrs 17 CAT6 Patch 18 Pole - 6 Mt Camera 19 Pole - 6 Mt Camera 19 Pole - 6 Mt Camera 20 Lighting At Camera 20 Lighting At Camera 20 Lighting At Camera 20 Camera 20	ox with 14	Z	xxxx	XXXX	xxxx	XXXX
11 PDU 5 Am 12 8 Port PoE Switch with 13 8 Port Swit Module 14 24 Port SFI RPS - Cont LR Module Module (2) 15 OFC Patch 16 CAT 6 Patch Mtrs 17 CAT6 Patch Patch Pole - 6 Mth Camera 19 Pole - 6 Mth Camera 20 Lighting Attention And Pole - Control of the Camera		14 Nos	xxxx	xxxx	xxxx	xxxx
12	Gang Box 14	14 Nos	XXXX	XXXX	XXXX	XXXX
Switch with	ips 14	14 Nos	XXXX	XXXX	XXXX	XXXX
Module 24 Port SFI RPS - Cont LR Module Module (2	+ Industrial 10 h LR Module	10 Nos	XXXX	XXXX	xxxx	xxxx
RPS - Cont LR Module Module (2) 15	tch with SR 1	1 Nos	xxxx	XXXX	XXXX	XXXX
15 OFC Patch 16 CAT 6 Patch Mtrs 17 CAT6 Patc 18 Pole - 6 Mt Camera 19 Pole - 6 Mt Camera 20 Lighting A	nectivity with es (18 Nos) & SR	1 Nos	xxxx	XXXX	xxxx	XXXX
Mtrs 17 CAT6 Patc 18 Pole - 6 Mt Camera 19 Pole - 6 Mt Camera 20 Lighting A		30 Nos	xxxx	XXXX	XXXX	XXXX
Pole - 6 Mt Camera Pole - 6 Mt Camera Lighting A	ch Chord - 5 45	45 Nos	xxxx	xxxx	xxxx	xxxx
Camera 19 Pole - 6 Mt Camera 20 Lighting A	ch Chord - 3 Mtrs 10	10 Nos	XXXX	XXXX	XXXX	XXXX
Camera 20 Lighting A		36 Nos	XXXX	XXXX	XXXX	XXXX
88		9 Nos	XXXX	XXXX	XXXX	XXXX
21 Farth Pite		45 Nos	XXXX	XXXX	XXXX	XXXX
		15 Nos	XXXX	XXXX	xxxx	XXXX
Earth Cable - Copper		2500 Mtrs	xxxx	xxxx	XXXX	XXXX
23 55 inch Dis		3 Nos	xxxx	xxxx	xxxx	XXXX
	e Insulated /Strip 250	2 Nos	xxxx	XXXX	xxxx	xxxx
25 42U Rack (1000mm)	e Insulated /Strip 250 splay 3				XXXX	XXXX

26	3 Core Armored Power Cable 2.5sqmm	2500	Mtrs	XXXX	XXXX	xxxx	xxxx
27	3 Core Unarmored Power Cable 2.5sqmm	500	Mtrs	XXXX	XXXX	XXXX	XXXX
28	6 KVA UPS with 2 Hrs Backup	1	Nos	XXXX	XXXX	XXXX	XXXX
29	HDPE Pipe	4000	Mtrs	XXXX	XXXX	XXXX	XXXX
30	Single Pole Surge Protector	14	Nos	xxxx	XXXX	XXXX	xxxx
31	Ethernet(LAN) Surge Protector	45	Nos	xxxx	XXXX	XXXX	xxxx
32	Cable Route Markers	28	Nos	XXXX	XXXX	XXXX	XXXX
33	Industrial Flexible 1/2 inch hoses	3000	Mtrs	XXXX	XXXX	XXXX	XXXX
34	OFC and Power Cable Clamping with L angle and U clamps	1	Lot			XXXX	XXXX
35	Digging - Soft Soil (Bricks and Sand)	1000	Mtrs			XXXX	XXXX
36	Digging - Hard Soil (Bricks and Sand)	500	Mtrs			XXXX	XXXX
37	Adjustable Ladder with seat extendable up to 10m	1	Nos	XXXX	XXXX		
38	OFC Splicing	400	Nos			xxxx	XXXX
39	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges	1	Lot			XXXX	XXXX
	Total without	t AMC a	nd GST		XXXX		XXXX
40	Comprehensive AMC of 4 years after 3 years warranty	1	Lot	XXXX	XXXX	XXXX	XXXX
	Total C	AMC Co	ost		XXXX		XXXX
		Total	l Value excludi	ing GST	XXXX		XXXX
			GS	T@18%	XXXX		XXXX
		Tota	l Value includi	ing GST	XXXX		XXXX

NOTE- Blank Cells need not be filled.

4. K-SITE (LRDE), KOLAR

	K-SITE (LRDE), KOLAR			SUPPLY		INSTAL	LATION
Sl. No.	Item Description	Qty	Units	Unit Rate (Rs)	Amount (Rs)	Unit Rate (Rs)	Amount (Rs)

1	Bullet Camera - Outdoor with Pole Mount & Power Adapter	63	Nos	xxxx	xxxx	xxxx	xxxx
2	PTZ Camera- Outdoor with Pole mount adapter large, pendant mount & surveillance cabinet 230 VAC	55	Nos	XXXX	XXXX	XXXX	XXXX
3	Server / Storage with VMS 256 Channel "All-in-one recording, viewing and management solution for 118 Nos network surveillance camera & expandable Up to 256 channels; Recording of all cameras at resolution @ 15 FPS for 90 days of recording"	2	Nos	XXXX	XXXX	XXXX	XXXX
4	Video Management Software - 118 Cameras	1	Nos	XXXX	XXXX	XXXX	XXXX
5	CAT 6 Armoured Cable	2000	Mtrs	XXXX	XXXX	XXXX	XXXX
6	12 Core OFC Armoured Cable Single Mode	16000	Mtrs	xxxx	XXXX	XXXX	xxxx
7	6 Core OFC Armoured Cable Single Mode	16000	Mtrs	xxxx	XXXX	xxxx	xxxx
8	6/8 Port LIU	71	Nos	XXXX	XXXX	XXXX	XXXX
9	12 Port LIU	8	Nos	XXXX	XXXX	xxxx	XXXX
10	24 Port LIU	16	Nos	XXXX	XXXX	XXXX	XXXX
11	Junction Box with Accessories	86	Nos	XXXX	xxxx	xxxx	XXXX
12	Electrical Gang Box	86	Nos	xxxx	xxxx	XXXX	XXXX
13	PDU 5 Amps	86	Nos	XXXX	XXXX	XXXX	XXXX
14	8 Port PoE + Switch loaded with LR Modules (2 Nos)	20	Nos	XXXX	XXXX	XXXX	XXXX
15	24 Port SFP Switch fully loaded with LR Module	10	Nos	xxxx	XXXX	xxxx	xxxx
16	24 Port SFP L3 Switch with RPS Connectivity with LR Module (20 Nos)	1	Nos	xxxx	XXXX	xxxx	xxxx
17	24 Port Gigabit L3 Switch with RPS Connectivity with SR Module	1	Nos	xxxx	XXXX	xxxx	xxxx
18	Single mode Media Convertor with Adaptor	60	Nos	xxxx	xxxx	xxxx	xxxx
19	OFC Patch Chord - LC-LC	200	Nos	XXXX	XXXX	XXXX	XXXX
20	CAT6 Patch Chord - 5 Mtrs	84	Nos	XXXX	XXXX	XXXX	XXXX
21	CAT6 Patch Chord - 3 Mtrs	20	Nos	XXXX	XXXX	xxxx	XXXX
22	Pole - 6 Mtrs	84	Nos	xxxx	XXXX	xxxx	xxxx
23	Lighting Arresters	86	Nos	xxxx	XXXX	XXXX	xxxx
24	Earth Pits	86	Nos	XXXX	XXXX	XXXX	XXXX

25	Earth Cable Insulated / Strip - Copper	7000	Mtrs	xxxx	xxxx	xxxx	xxxx
26	55 inch Display	6	Nos	xxxx	XXXX	XXXX	XXXX
27	Workstation (24 Core /128GB / 512GB SSD x 2 Nos/ RTX4000 / Win 11)	4	Nos	xxxx	xxxx	xxxx	xxxx
28	Joystick for Camera Control	2	Nos	xxxx	XXXX	XXXX	XXXX
29	Door Access Control System (Face Biometric Reader with EM Lock & Push Button)	1	Nos	xxxx	xxxx	xxxx	xxxx
30	9U Rack with Accessories	22	Nos	XXXX	XXXX	XXXX	XXXX
31	42U Rack (800mm x 1000mm)	1	Nos	XXXX	XXXX	XXXX	XXXX
32	3 Core Armoured Power Cable 2.5sqmm	18000	Mtrs	xxxx	XXXX	xxxx	xxxx
33	3 Core Unarmoured Power Cable 2.5sqmm	1000	Mtrs	xxxx	XXXX	XXXX	XXXX
34	6 KVA UPS with 2 Hrs Backup	3	Nos	xxxx	XXXX	XXXX	XXXX
35	1 KVA UPS with 30 Minutes Backup	22	Nos	xxxx	XXXX	XXXX	xxxx
36	PVC Pipe	3000	Nos	xxxx	XXXX	XXXX	XXXX
37	Single Pole Surge Protector	86	Nos	xxxx	XXXX	XXXX	xxxx
38	Ethernet(LAN) Surge Protector	95	Nos	xxxx	XXXX	XXXX	XXXX
39	Cable Route Markers	400	Nos	xxxx	XXXX	XXXX	XXXX
40	HDPE Pipe	32000	Mtrs	xxxx	XXXX	xxxx	XXXX
41	GI Pipe	1000	Mtrs	XXXX	XXXX	XXXX	XXXX
42	OFC And Power Cable Clamping with L angle and U clamps	1	Lot			XXXX	xxxx
43	Industrial Flexible 1/2 inch hoses	5000	Mtrs	XXXX	XXXX	XXXX	XXXX
44	Digging - Soft Soil (Bricks and Sand)	3000	Mtrs			XXXX	xxxx
45	Digging - Hard Soil (Bricks and Sand)	2000	Mtrs			XXXX	XXXX
46	Adjustable Ladder with seat extendable up to 10m	1	Nos	xxxx	XXXX	P	
47	OFC Splicing	3600	Nos			xxxx	XXXX
48	Installation, Calibration of all Cameras, IT Components and Non IT Components & Accessories, Testing & Commissioning, Training & Documentation charges		Lot			xxxx	XXXX
	Total without AM	C and GS	ST		XXXX		xxxx
49	Comprehensive AMC of 4 years after 3 years warranty	1	Lot	xxxx	XXXX	XXXX	XXXX

Total CAMC Cost	XXXX	xxxx
Total Value excluding GST	XXXX	XXXX
GST@18%	XXXX	XXXX
Total Value including GST	XXXX	XXXX

NOTE- Blank Cells need not be filled.

Note:

Above rates are inclusive of packing, forwarding, freight, insurance, commissioning, warranty or any other charges & exclusive of GST.

The total cost column will be used for evaluation of the tender for determining the L1 cost.



COMPLIANCE CHART

CCTV VIDEO SURVEILLANCE SYSTEM

TECHNICAL SPECIFICATIONS (INCLUDING CHANGES IN CORRIGENDUM)

SI No	Characteristics	Description	Compliance (Yes/No)
1	Sensor type	1/2.8-inch CMOS or better	
2	Total sensor pixels	1920 (H) x 1080 (V) or better	
3	Sensitivity	(Color 0.0210 lx, Mono 0.0040 lx, With IR 0.0 lx) or better	
4	MTBF	MTBF 527,735 Hrs or better	
5	WDR approved & measured as per	OECF analysis according to IEC 62676 Part 5, it should be 105 dB or higher	4
	measured as per	144dB HDR or higher	
6	True Day/Night	Auto, Color, Monochrome	
7	Noise reduction	iDNR / 3DNR with separate temporal and spatial adjustments	
8	Video resolution	1920x1080; 1080x1920;1536 × 864;864 × 1536 1280 × 720;720 × 1280;768 × 432 or higher	
9	Video compression	H.265 MP, H.264 MP; M-JPEG	
10	Max. frame rate	60 fps or higher	
11	IR Range	Minimum 45m or better	
12	Lens type	Automatic Varifocal 3.2 to 10.5 mm or higher with P-iris	
13	Lens adjustment	Motorized zoom / focus	
14	Detection Range of Objects	138 m (453 ft) or better as per EN-62676-4	
15	Audio communication	Two-way, full duplex	
16	Audio Line In/Out	1/1	
17	Alarm In/Out	1/1	
18	Ethernet	10/100 Base-T, auto-sensing, half/full duplex	953
19	Ethernet connector	RJ45	
20	Connectivity	ONVIF Profile S, ONVIF Profile G, ONVIF Profile T & ONVIF Profile M or better	
21	Analysis Type	Edge Based Analytics or better	¥
22	Alarm Rules	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle /removed object; Counting; Occupancy; Crowd density estimation; Condition change; Similarity search; Flow / counter flow; Objects stopping or starting to move. In-built AI to classify person and vehicle and detect up to 64 objects simultaneously in FOV	
23	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	

24	Memory card slot	Min. 512GB & maximum 2TB support	
25	SD card health monitoring	Extreme lifetime and health monitoring support that provides early service indication	
26	Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/ RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox™, CHAP, digest authentication	
27	Encryption	TLS1.2,1.3 AES128, AES256	
28	Data Security:	 Secured connections supported (HTTPS) Password enforcement at initial set up Execution of 3rd party software is disabled Firmware updates via OEM digitally signed firmware files only Detect changes in a configuration Support of customer specific certificates Support of Microsoft Active Directory for safe management of user access rights Regular updates via security patches UL-cap certified Crypto coprocessor (TPM)RSA 2048 bit Local storage encryption XTS-AES 	
29	Hardware for data security	Unique Crypto processor / TPM	III I
30	Dual Power Supply for redundancy	POE and 12VDC	
31	Operating temperature	Min 0°C to +55°C	
32	Humidity	5% to 93% relative humidity (condensing)	
33	Ingress protection	IP66	
34	Impact protection	IK10	
35	Certifications:	CE, FCC, UL, BIS	upt to the

SI No	Characteristics	Description	Compliance (Yes/No)
1	Sensor type	1/2.8-inch CMOS or better	
2	Total sensor pixels	1920 (H) x 1080 (V) or better	
3	Sensitivity	(Color 0.0210 lx, Mono 0.040 lx, With IR 0.0 lx) or better	
4	MTBF	MTBF 527,735 Hrs or better	
5	WDR approved & measured as per	OECF analysis according to IEC 62676 Part 5, it should be 105 dB or higher	
	measured as per	144dB HDR or higher	
6	True Day/Night	Auto, Color, Monochrome	
7	Noise reduction	iDNR / 3DNR with separate temporal and spatial adjustments	
0	**** 1 . · ·	1920x1080; 1080x1920;1536 × 864;864 × 1536	
8	Video resolution	1280 × 720;720 × 1280;768 × 432 or higher	
9	Video compression	H.265 MP, H.264 MP; M-JPEG	
10	Max. frame rate	60 fps or higher	
11	IR Range	Minimum 45m or better	
12	Lens type	Automatic Varifocal 3.2 to 10.5 mm or higher with P-iris	
13	Lens adjustment	Motorized zoom/focus	
14	Detection Range of Objects	138 m (453 ft) or better as per EN-62676-4	<u> </u>
15	Audio communication	Two-way, full duplex	
16	Audio Line In/Out	1/1	
17	Alarm In/Out	1/1	
18	Ethernet	10/100 Base-T, auto-sensing, half/full duplex	
19	Ethernet connector	RJ45	
20	Connectivity	ONVIF Profile S, ONVIF Profile G, ONVIF Profile T & ONVIF Profile M or better	
21	Analysis Type	Edge Based Analytics or better	
22	Alarm rules	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle /removed object; Counting; Occupancy; Crowd density estimation; Condition change; Similarity search; Flow / counter flow; Objects stopping or starting to move. In-built AI to classify person and vehicle and detect up to 64 objects simultaneously in FOV.	
23	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	
24	Memory card slot	Min. 512GB & maximum 2TB support	U
25	SD card health monitoring	Extreme lifetime and health monitoring support that provides early service indication	

26	Protocols:	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/ RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox TM , CHAP, digest authentication.
27	Encryption	TLS1.2,1.3 AES128, AES256
28	Data Security	 Secured connections supported (HTTPS). Password enforcement at initial set up. Execution of 3rd party software is disabled. Firmware updates via OEM digitally signed firmware files only Detect changes in a configuration. Support of customer specific certificates. Support of Microsoft Active Directory for safe management of user access rights. Regular updates via security patches. UL-cap certified. Crypto coprocessor (TPM) RSA 2048 bit. Local storage encryption XTS-AES.
29	Hardware for data security	Unique Crypto processor / TPM
30	Dual Power Supply for redundancy	POE/POE+ and 12VDC
31	Operating temperature	Min 0°C to +50°C
32	Humidity	5% to 100% relative humidity (condensing)
33	Ingress protection	IP54
34	Impact protection	IK10
35	Certifications:	CE, FCC, UL, BIS

		Indoor Bullet Camera 4MP	
SI No	Characteristics	Description	Compliance (Yes/No)
1	Sensor type	1/1.8-inch CMOS or better	
2	Total sensor pixels	2688 x 1520 or better	
3	Sensitivity	(Color: 0.0078 lx, Mono: 0.0011lx) or better	
4	WDR	141 dB or better	
5	True Day/Night	Auto, Color, Monochrome	
6	Noise reduction	iDNR / 3DNR with separate temporal and spatial adjustments	
7	Video resolution	4.1 MP 2688 x 1520 or better	
8	Video compression	H.265, H.264, M-JPEG	
9	Max. frame rate	60 fps or better	
10	IR Range	80m or better	
11	Lens type	4.7mm-10mm or higher	
12	Lens adjustment	Motorized zoom/focus	
13	Audio communication	Full Duplex	
14	Audio Line In/Out	1/1	
15	Alarm In/Out	1/1	
16	Ethernet	Shielded RJ45; Punch-down connector	
17	Analysis Type	Edge Based Analytics	
18	Alarm rules	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle /removed object; Counting; Occupancy; Objects stopping or starting to move. In-built AI to classify person and vehicle and detect up to 64 objects simultaneously in FOV	
19	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	
20	Memory card slot	Up to 2TB	
21	Protocols:	IPv4; IPv6; UDP; TCP; HTTP; HTTPS;RTP/RTCP; IGMP V2/V3; ICMP;ICMPv6; RTSP; FTP; ARP; DHCP;APIPA (Auto-IP, link local address);NTP (SNTP); SNMP (V1, MIBII);SNMP (V3, MIBII); DNS; DNSv6;DDNS (DynDNS.org, selfHOST.de,no-ip.com); SMTP; iSCSI; UPnP(SSDP); DiffServ (QoS); LLDP;SOAP; CHAP; Digest authentication; Dropbox TM	
22	Encryption	TLS 1.2; TLS 1.0; TLS 1.1; AES 256;AES 128; TLS 1.3	

23	Data Security:	 Secured connections supported (HTTP\$). Password enforcement at initial set up. Firmware updates via OEM digitally signed firmware files only. Detect changes in a configuration. Support of customer specific certificates. Support of Microsoft Active Directory for safe management of user access rights. Regular updates via security patches. UL-cap certified. Crypto coprocessor (TPM) RSA 4096 bit (with future firmware update); RSA 2048 bit. Local storage encryption XTS-AES. 	
24	Hardware for data security	Unique Crypto-processor / TPM	X.94 - 405
25	MTBF	More than 1,00,000hrs	
26	Dual Power Supply for redundancy	PoE IEEE 802.3af / 802.3at Type 1- or POE+	
27	Operating temperature	0°C to +60 °C	
28	Humidity	5% – 100% (condensing)	
29	Ingress protection	IP 67/ IP6K9K	
30	Impact protection	IK10	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Sensor type	1/1.8-inch CMOS or better	
2	Total sensor pixels	2688 x 1520or better	
3	Sensitivity	(Color: 0.0038 lx,Mono: 0.0013 lx) or better	
4	WDR	141 dB or better	
5	True Day/Night	Auto, Color, Monochrome	
6	Noise reduction	iDNR / 3DNR with separate temporal and spatial adjustments	
7	Video resolution	4MP or better	
8	Video compression	H.265, H.264, M-JPEG	
9	Max. frame rate	60 fps or better	
10	IR Range	140m or better	
11	Lens type	10.5-47mm or higher	
12	Lens adjustment	Motorized zoom/focus	
13	Audio communication	Full Duplex	mote. Th
14	Audio Line In/Out	1/1	Mark V
15	Alarm In/Out	1/1	
16	Ethernet	Shielded RJ45; Punch-down connector	
17	Connectivity	RJ45/OFC	
18	Analysis Type	Edge Based Analytics or better	
19	Alarm rules	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle /removed object; Counting; Occupancy; Crowd density estimation; Condition change; Similarity search; Flow / counterFlow; Objects stopping or starting to move. In-built AI to classify person and vehicle and detect up to 64 objects simultaneously in FOV	
20	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	7.27.
21	Memory card slot	Up to 2TB	ĮĘ.
22	Protocols:	IPv4; IPv6; UDP; TCP; HTTP; HTTPS;RTP/RTCP; IGMP V2/V3; ICMP;ICMPv6; RTSP; FTP; ARP; DHCP;APIPA (Auto-IP, link local address);NTP (SNTP); SNMP (V1, MIBII);SNMP (V3, MIBII); DNS; DNSv6;DDNS (DynDNS.org, selfHOST.de,no-ip.com); SMTP; iSCSI; UPnP(SSDP); DiffServ (QoS); LLDP;SOAP; CHAP; Digest authentication; Dropbox TM	=
23	Encryption	TLS 1.2; TLS 1.0; TLS 1.1; AES 256;AES 128; TLS 1.3	e "n

24	Data Security:	 Secured connections supported (HTTPS). Password enforcement at initial set up Firmware updates via OEM digitally signed firmware files only. Detect changes in a configuration Support of customer specific certificates. Support of Microsoft Active Directory for safe management of user access rights. Regular updates via security patches. UL-cap certified. Crypto coprocessor (TPM) RSA 4096 bit (with future firmware update); RSA 2048 bit. Local storage encryption XTS-AES. 	
25	Hardware for data security	Unique Crypto-processor / TPM	
26	MTBF	More than 1,00,000hrs	
27	Dual Power Supply for redundancy	PoE IEEE 802.3af / 802.3at Type 1,Class 3; PoE+	
28	Operating temperature	0°C to +60 °C	
29	Humidity	5% - 100% (condensing)	
30	Ingress protection	IP 67 / IP6K9K	
31	Impact protection	IK10	w
32	Certifications:	FCC, UL, CE, BIS, UL-CAP	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Sensor type	1/2.8-inch CMOS or better	(103/110)
2	Total sensor pixels	1920x1080 or better	
3	Sensitivity	(Color 0.07 lx, Mono 0.01 lx, 0 lx (IR ON)) or better	
4	MTBF	MTBF >120,000 Hrs	
. 5	WDR	120 DB or better	1.5
6	True Day/Night	Auto, Color, Monochrome	
7	Noise reduction	iDNR/3DNR	
8	Intelligent defog	Intelligent Defog	
9	Video resolution	1080P,720P, SD, D1 or better	
10	IR Distance	90 meter(without Zoom) &180 Meter(with Zoom) or better	
11	Video compression	H.265 MP, H.264 MP; M-JPEG	
12	Max. frame rate	50/60 fps or higher	
13	Optical and Digital zoom	30x Optical & 12X digital or better	
14	Lens type	6.9-135mm or higher	
15	Lens adjustment	Motorized zoom/focus	
16	Pan angle	360 ° Continuous	
17	Tilt angle	-90° to 3° (189 °) or better	
18	Pre set Position	256 or better	
19	Guard Tour	2 (Maximum Total duration of 15 minutes for each Tour) and 2 Pre position tour or better	
20	Sector/Blanking	16 Independent sectors with 20 characters on each title	
21	Pre position speed	Pan: 240 %, Tilt: 160 % or better	
22	Shutter Speed	$1/1 \sim 1/10,000$ sec or better	
23	Audio communication	Two-way, full duplex	
24	Audio Line In/Out	1/1	
25	Alarm In/Out	1/1	
26	Ethernet	10/100 Base-T, auto-sensing, half/full duplex	
27	Ethernet connector	RJ45	
28	Connectivity	ONVIF Profile S, ONVIF Profile G &ONVIF Profile T or better	
29	Analysis Type	Edge Based Analytics or better	
30	Alarm rules	Rule based alarms and tracking, Line crossing; Enter / leave field, Follow route, Loitering; Idle / removed object, People counting, Crowd density estimation.	
30	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	9) N
31	Memory card slot	Min. 512 GB support or better	

32	Protocols:	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/ RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP,FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox™, CHAP, digest authentication
33	Encryption	TLS1.0/1.2, AES128, AES256
34	Data Security	 Secured connections supported (HTTPS). Password enforcement at initial set up. Execution of 3rd party software is disabled. Firmware updates via OEM digitally signed firmware files only. Detect changes in a configuration. Support of customer specific certificates. Support of Microsoft Active Directory for safe management of user access rights. Regular updates via security patches.
35	Hardware for data security	Unique Crypto-processor / TPM
36	Dual Power Supply for redundancy	POE/POE+ and 12VDC
37	Operating temperature	0°C to +60 °C
38	Humidity	Up to 90% (NON condensing)
39	Ingress protection	IP 66 or better
40	Pre position accuracy	+-0.1 ° typ.
41	Privacy Masking	32 Individual configurable
42	Certifications:	CE, FCC, UL, VCCI, BIS

SI No	Characteristics	Description	Compliance (Yes/No)
1.	Sensor type	1/1.8 inch HD CMOS or better	
2.	Total sensor pixels	2688 x 1520 (4 MP) or better	
3.	Sensitivity	(Color 0.0101 lux, Mono 0.0016 lux, 0 lx (IR ON)) or better	
4.	MTBF	MTBF >120,000 Hrs	
5.	WDR approved & measured as per	OECF analysis according to IEC 62676 Part 5, it should be 108 dB or better	
6.	True Day/Night	Auto, Color, Monochrome	
7.	Noise reduction	iDNR / 3DNR with separate temporal and spatial adjustments	
8.	Intelligent defog	Intelligent Defog automatically adjusts parameters for best picture in foggy or misty scenes (switchable)	- 4
9.	Video resolution	1440p, 1080P,720P, SD, D1 or better	
10.	IR Distance	100 Meter (without Zoom) & 320 Meter (with Zoom) or better	,1 1
11.	White Light illuminator	60m or better	
12.	Wiper	Integrated, long-life silicone wiper	
13.	Video compression	H.265 MP, H.264 MP; M-JPEG	10
14.	Max. frame rate	60 fps or better	
15.	Optical and Digital zoom	30x Optical &16X digital or better	
16.	Lens type	6.6 mm to 198 mm or better & Auto Focus zoom lens	
17.	Lens adjustment	Motorized zoom/focus	
18.	Pan angle	360 ° Continuous	
19.	Tilt angle	-90° to 5° (Auto-flip 190°)	
20.	Pre set Position	256	
21.	Guard Tour	2 (Maximum Total duration of 15 minutes for each Tour) and 2 Pre position tour.	
22.	Sector/Blanking	16 Independent sectors with 20 characters on each title	
23.	Pre position speed	Pan: 240 %, Tilt: 100 % or better	
24.	Audio communication	Two-way, full duplex	
25.	Audio Line In/Out	1/1	
26.	Alarm In/Out	1/1	
27.	Ethernet	10/100 Base-T, auto-sensing, half/full duplex	
28.	Ethernet connector	RJ45/OFC	
29.	Connectivity	ONVIF Profile S, ONVIF Profile M, ONVIF Profile G &ONVIF Profile T or better	
30.	Analysis Type	Edge Based Analytics or better	
31.	Alarm rules	Rule based alarms and tracking, Line crossing, Enter / leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation	- 28

32.	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	
33.	Memory card slot	Min. 512 GB support or better	
34.	SD card health monitoring	Extreme lifetime and health monitoring support that provides early service indication	
35.	Protocols:	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP,FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II),802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox TM , CHAP, digest authentication	
36.	Encryption	TLS1.0/1.2, AES128, AES256	
37.	Data Security:	Secured connections supported (HTTPS) Password enforcement at initial set up Execution of 3rd party software is disabled Firmware updates via OEM digitally signed firmware files only Detect changes in a configuration Support of customer specific certificates Support of Microsoft Active Directory for safe management of user access rights Regular updates via security patches	
38.	Hardware for data security	Unique Crypto-processor / TPM	
39.	Dual Power Supply for redundancy	POE+ (IEEE 802.3at) and 24VAC	
40.	Operating temperature	0°C to +60 °C	
41.	Humidity	Up to 90% (NON condensing)	
42.	Ingress protection	IP 66	
43.	External Mechanical Impact (IK Code or Impact rating)	IEC 62262 IK10 (excluding glass window/wiper)	
44.	Pre position accuracy	+-0.1 ° typ.	
45.	Privacy Masking	32 Individual configurable	
46.	Certifications:	CE, FCC, UL, VCCI, BIS	

12MP IR Multi Sensor Camera				
SI No	Characteristics	Description	Compliance (Yes/No)	
1	Sensor type	4 x 1/2.7-inch CMOS or better		
2	Total sensor pixels	4x 2048 (H) x 1536 (V) or better	71	
3	Sensitivity	(Color 0.1 lx ,0 lux with IR ON) or better		
4	WDR approved & measured as per	OECF analysis according to IEC 62676 Part 5, it should be 100 dB or better 120dB HDR or better	ar 's	
5	True Day/Night	Auto, Color, Monochrome		
6	Noise reduction	iDNR / 3DNR with separate temporal and spatial adjustments		
7	Intelligent defog	Intelligent Defog automatically adjusts parameters for best picture in foggy or misty scenes (switchable)		
8	Video resolution	4x 2048 x 1536 (4:3) @30 fps or better, 4x 1920 x 1080 (16:9) @30 fps or better		
9	Video compression	H.265 ,H.264 ; M-JPEG		
10	Max. frame rate	30 fps or better		
11	IR Range	360° LED up to 30m or better		
12	Lens type	Automatic Varifocal 3.7 - 7.7 mm or better		
13	Lens adjustment	Motorized zoom/focus		
14	Audio communication	Two-way, full duplex		
15	Audio Line In/Out	1/1		
16	Alarm In/Out	1/1		
17	Ethernet	10/100 Base-T, auto-sensing, half/full duplex		
18	Ethernet connector	RJ45		
19	Connectivity	ONVIF Profile S, G&T or better		
20	Analysis Type	Edge Based Analytics and AI based camera trainer or better		
21	Alarm rules	Any object, Object in field, Line crossing, Enter /leave field, Loitering, Follow route, Idle /removed object, Counting, Occupancy, Crowd density estimation, Condition change, Similarity search, Flow / counter flow. AI trainer customized object training.		
22	Other functions	Sharpness, Backlight compensation, Contrast enhancement, Display stamping (Name/logo/Time), Pixel counter	0	
23	Analog Video Output	Required		
. 24	Memory card slot	Min. 512 GB support or better		
25	SD card health monitoring	Extreme lifetime and health monitoring support that provides early service indication		

26	Protocols:	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II),802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox™, CHAP, digest authentication.	
27	Encryption	TLS1.0/1.2, AES128, AES256	
28	Data Security	 Secured connections supported (HTTPS). Password enforcement at initial set up Execution of 3rd party software is disabled. Firmware updates via OEM digitally signed firmware files only. Detect changes in a configuration Support of customer specific certificates. Support of Microsoft Active Directory for safe management of user access rights. Regular updates via security patches. 	
29	Hardware for data security	Unique Crypto-processor / TPM	
30	Dual Power Supply for redundancy	POE+ and 24VAC	
31	Operating temperature	0°C to +55 °C	
32	Humidity	5% to 93% RH humidity (Non condensing)	
33	Ingress protection	IP66 and NEMA 4X	
34	Impact protection	IK10	W = T
35	Certifications:	CE, FCC, UL, BIS	

SI No	Characteristics	Compliance (Yes/No)
	The IP Video Management Appliance shall be a RAID-5 protected with hot spare,	
1	all-in-one recording, viewing and management solution for network surveillance	
1	systems supporting to 256 channels.	
2	The IP Video Storage Appliance shall offer an optional camera expansion license up	
5-38	to a maximum of 64 cameras per appliance. Software updates shall be available at no extra charge during the product warranty	
3	period. The software installed on the IP Video Management Appliance shall not be	85
J	subject to any additional Software Maintenance Agreements (SMAs).	
7/20	The IP Video Management Appliance shall utilize "enterprise-rated" hard drives in a	
4	fault tolerant RAID-5 configuration.	
5	The IP Video Management Appliance shall offer a band width of at least 550Mbit/s	
3	or better.	
6	The IP Video Management Appliance shall offer remote monitoring via a desktop	
	application or a Web browser	
7	The IP Video Management Appliance shall come pre-installed and pre-configured	
	with all necessary software. The IP Video Management Appliance should contain a backup image of all system	
8	software needed to a full system recovery on a non-volatile memory/storage.	
	Access to Video:	
	The IP Video Management Appliance shall offer Dynamic Trans coding technology	
9	that retrieves data and subsequently decodes and decompresses the data stream to a	
	lower bit stream.	
10	The IP Video Management Appliance shall instantly enhance the video detail to full	
10	HD quality when the video is paused.	
	Management:	
11	The IP Video Management Appliance shall come with the VMS Management	
11	application pre-installed and pre-licensed.	
12	The IP Video Management Appliance shall have single dashboard for configuration	
	and operations management.	
	Health Monitoring:	
13	The IP Video Management Appliance shall provide SNMP, Remote Desktop and	
	HTTP based monitoring	
14	The IP Video Management Appliance shall offer high-availability hardware, embedded design and system wide monitoring.	
S 75 - N	Processor:	876 - 1770
<u> 1</u>		186 AESIG
15	The IP Video Management Appliance shall contain a Intel Xeon Processor E- 2226GE(12 MB Cache, 3.4 GHz) processor	
16	OS-Microsoft Window Server IoT 2019 for Storage Standard	
	Protocol - iSCSI	
17		
18	B/W Capacity - 550Mbit/s or better	
19	The IP Video Management Appliance processor shall feature 12MB Cache.	
	Memory:	
20	At least 16 GB RAM or better	
	Storage:	
	The IP Video Management Appliance shall contain at least, 8, 3.5". SATA storage	
21	trays. The SSD Capacity shall be 512 TB or better to support 90 days recording.	
22	SAS/SATARA ID card with RAID-5/6 support	
- 1 M-23	The IP Video Management Appliance shall include 2 SSD drives in RAID-1	
23	configuration.	
24	Electrical Input: 230V ac+/-5%,50Hz	

	Network:	
25	2RJ 45 Gigabit Ethernet LAN ports,1 IPMI BMC port	
	USB ports:	
26	Should Have at least, Front: 2 USB 2.0 ports, Rare: 2USB 3.0 ports.	
27	Operating Temperature: +10°C to +35°C	
28	Operating Relative Humidity: 8 to 90%, non-condensing	
29	Quality - This product shall be manufactured by a firm whose quality system is in compliance with the I.S. /ISO 9001/EN 29001, QUALITY SYSTEM	

SI	Video Management Software Characteristics	Compliance
No		(Yes/No)
1	The Video Management System (VMS) specified shall be an IP video security solution that provides seamless management of digital video, audio and data across an IP network for Viewing, Recording, control and Playback of IP CCTV system. It shall have all required Life Time Licenses for use of the entire system.	
2	The VMS shall be highly scalable and support maximum 256 cameras during installation without any additional cost of hardware.	
3	The proposed solution shall not require proprietary computer, server, and storage hardware and shall provide seamless integration with third party security Infrastructure, wherever possible. Software shall be Open platform network video compliant with SDKs available for integration with 3rd party systems.	
4	The VMS system shall be based on the latest in software programming technology. The software should be compatible with Windows Operating Systems (Windows Server 2016 / Windows 10 or later versions) and should be user friendly. The system should allow operation with PC Keyboard, Mouse, CCTV Keyboard (Joystick).	
5	The system shall allow the recording, live monitoring, playback of multiple archived video, audio, and data simultaneously.	
6	The VMS shall allow for 2-way audio communication between camera unit and client, without any need of additional software licenses.	11
7	The VMS Audio function shall be synchronized with video.	
8	The VMS should support storage of RAID-5/6 configuration with hot swappable Hard disks. The VMS should support iSCSI protocol.	
9	The VMS should support MJPEG, MPEG -4, H.264, H.265 video compressions. It should be able to support minimum two individually configurable H.265 streams.	1 112 11
10	In case of Network Failover, the video should be stored in local storage.	
11	Offered VMS should support 64 bit OS.	
12	Offered VMS shall have capability to multicast videos to clients.	
13	The VMS shall support the Open Network Video Interface Forum (ONVIF) compliant Cameras and devices.	
14	The offered video management system should have integration with Video Wall.	field
15	The management server shall be able to intelligently scan an IP network for new devices (cameras or servers etc.) simultaneously.	
16	The system administrator shall have rights to add/delete/configure users with rights.	
17	It shall be possible to view the rights of each user or the cameras which can be viewed / controlled by each user.	
1,8	It shall also be possible to add/delete cameras, configure cameras, assign priorities to users, configure alarm monitors etc.	
19	It shall also be possible to configure user groups with different rights and assign users to user groups.	
20	Should be capable of N+N configuration in future for all video recording management and storage.	7
21	It shall be capable of pre-setting the various positions for PTZ cameras.	
22	Built-in map function in the Client shall be provided for an overview of the system and for instant camera preview on mouse click on the MAP.	
23	Alarm list with extensive filtering capabilities and an alarm preview in both Live and Playback mode.	14
24	The VMS shall support Dual Authorization logon	
25	The VMS shall interface with the Video Analytics techniques of the cameras or the video analytic server to provide advanced motion detection that analyzes object size, direction, and speed as well as detecting objects entering or leaving designated areas.	

26	VMS shall support Lightweight Directory Access Protocol (LDAP) that allows integration with enterprise user management systems such as Microsoft Active Directory		
27	The video management system shall be configurable to force an alarm workflow. In this case, the alarm cannot be cleared until the workflow is processed.		
28	The system shall protocol every event and alarm in an SQL database. The alarm entry shall contain the camera titles that have been recorded due to this alarm.		
29	The video management system shall support switching of cameras to monitors connected to decoders. The cameras shall be selectable via drag and drop from the logical tree or from the sitemaps		
	Features of Client Software		
30	Client shall consist of Administrator Tool application and a Monitoring application. Client should also be able to play archived videos. All the relevant software licenses should be included. All the client licenses should work on any work station and should not be restricted to be used with specific workstation.		
31	VMS Server software shall allow the client's seamless operation of all cameras regardless of the actual connection to different recording servers. VMS Software shall allow the client applications to interact with all the camera / database servers simultaneously and allow simultaneous display of live video/recorded video		
32	It shall be possible to define priority based camera control rights for each camera or a group of cameras		
33	Client application should provide different Video display layouts which should include Full screen Quad, etc. It shall be possible to view live video from cameras on the surveillance system from 1 to 25 (Minimum) per screen		
34	Client shall perform the following applications simultaneously without interfering with any of the Archive Server operations (Recording, Alarms, etc.)		
35	It shall provide live display of camera sequences, panoramic camera views.		
36	It shall provide playback of archived video.		
37	It shall provide instant replays of Video and Audio.		
38	Client applications shall support any form of IP network connectivity including: LAN, WAN, VPN, Internet, and Wireless.		
39	Client applications shall support IP Multicast and Unicast video and audio streaming as required depending on the network capabilities.	n-14-)	
40	Client application shall enable playback of audio along with video.		
41	Client application shall be able to control the playback with play, pause, forward, and speed buttons.	*:	
42	Client application shall allow operators to add identification with description to recorded clips of video or audio.		
43	It shall be possible to playback of recorded video simultaneously 25 cameras on the surveillance system, with a selection of advanced navigation tools, including an intuitive timeline browser.		
44	Forensic Search All generated metadata shall be stored side-by-side to the video surveillance footage to enable operator to search through previous events without any pre-configuration of video analytic events.		
45	Cameras utilize an on-board caching mechanism, which allows them to mitigate short network outages and continue recording without any loss of frames.		
46	The video management software client application shall support the display of the live stream of multiple ultra HD cameras in without the impact on the smoothness of the displayed video by using Nvidia-based or Intel-based GPU decoding	V 50	
47	The video management system shall support configuring the edge-based intelligent video analysis parameters from the configuration software. The video management system shall react to events triggered by the edge-based intelligent video analysis of encoders or IP cameras.		

48	All events shall be stored in the logbook of the video management system to allow to search through these events. All generated metadata shall be stored side-by-side to the video surveillance footage to enable operator to search through previous events without any preconfiguration of video analytic events.	
49	The video management system shall support to confirm the authenticity of recorded video data. The video management system shall support to check hash values against recorded video data of cameras, which provide a recording stream with hash values signed by its certificates	75
50	The video management system shall be able to encrypt recorded video data using AES-256 without reducing the performance (number of cameras and throughput) of the recorder. The VMS S/W shall be certified by the authorized OEM for the VMS application to mitigate cyber security attacks.	
51	The video management system is listed as an ONVIF Profile-S conformant product on the ONVIF website.	
52	The system shall protocol every event and alarm in an SQL database. The alarm entry shall contain the camera titles that have been recorded due to this alarm	
53	The exported data in MP4 or MOV format may be played back using standard software, for example VLC.	E I

ARMORED UTP CAT6 CABLE				
SI No	Characteristics	Description	Compliance (Yes/No)	
1	Conductor	Solid Bare Electrolytic Grade Copper		
2	Nominal Conductor Diameter	23 AWG $(0.55 \pm 0.015$ mm $)$		
3	Insulation	Polyethylene (HDPE)		
4	Pairing	Twisted into Two core		
5	No. of Pair	4, Each Twisted together		
6	Inner Sheath	PVC		
7	Armoring	Aluminum Wire	10 10 10	
8	Outer Sheath	PVC		
9	Outer Sheath Color	Black		
10	Approximate OD	9.5 ± 0.5 mm		
11	RIP Cord	Yes (Optional)		
12	Sequential Marking	At Every Meter		
13	Cross Filler	HDPE		
14	Impedance	$100 \pm 15\%$ OHMS		
15	Temperature Rating	20 to +60°C		
16	Certifications	EIA/TIA 568-C.2 and IEC/ISO 11801		
17	Packing	305 Mtrs in a Wooden Reel		
18	General	Only Top Branded (Best in Market) Cables are preferred.		

6 Core Single Mode Fiber Optic Cable Armored					
SI No	Characteristics	Description	Compliance (Yes/No)		
1	Product	Fiber Optic Outdoor 6 Fiber Unitube Cable with Corrugated Steel Armoring, OS2, with HDPE Jacket			
2	Fiber Type	Single Mode - OS2			
3	Cable Type	Outdoor Tube Armored			
4	No of Cores (Fiber Count)	6 Nos			
5	Armor Type	Corrugated steel			
6	Cable Type	Loose tube			
7	Subunit Type	Gel-filled			
8	Jacket Material	High density polyethylene (HDPE)	erget 12 (4)		
9	Cable Qualification Standards	Telcordia GR-20-CORE			
. 10	Attenuation, maximum	0.22 dB/km @ 1,550 nm 0.34 dB/km @ 1,310 nm			
11	Standards Compliance	TIA-492CAAB (OS2) ANSI/TIA-568.C.3 IEC 60794-1	-=		
12	Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)			
13	ROHS.	Compliant .			
14	Regulatory Compliance/Certifications	Compliant as per SVHC/RoHS			

12 Core Single Mode Fiber Optic Cable				
SI No	Characteristics	Description	Compliance (Yes/No)	
1	Product	Fiber Optic Outdoor 12 Fiber Unitube Cable with Corrugated Steel Armoring, OS2, with HDPE Jacket		
2	Fiber Type	Single Mode - OS2	-Live II	
3	Cable Type	Outdoor Tube Armored		
4	No of Cores (Fiber Count)	12 Nos		
5	Armor Type	Corrugated steel		
6	Cable Type	Loose tube	ment .	
7	Subunit Type	Gel-filled		
8	Jacket Material	High density polyethylene (HDPE)		
9	Cable Qualification Standards	Telcordia GR-20-CORE	APT TO STATE OF THE STATE OF TH	
10	Attenuation, maximum	0.22 dB/km @ 1,550 nm 0.34 dB/km @ 1,310 nm		
11	Standards Compliance	TIA-492CAAB (OS2) ANSI/TIA- 568.C.3 IEC 60794-1		
12	Operating Temperature	: -20 °C to +70 °C (-4 °F to +158 °F)		
13	ROHS	Compliant		
14	Regulatory Compliance/Certifications	Compliant as per SVHC/RoHS		
15	General	Only Top Branded (Best in Market) Cables are preferred.		

Fiber Patch Panel - 6 Port LIU fully loaded with Pigtails - LC Connectors					
SI No	Characteristics	Description	Compliance (Yes/No)		
1	Product	Fiber Optic Termination Panel, 1U, 19 in, 6 Port LC			
2	Ports	6 Ports			
3	Connector Type	LC			
4	Material Type	Steel / CRC Powder Coat			
5	Functionality	Patching			
6	Interface Feature, front	Standard			
7	Interface, front	LC	THE PARTY		
8	Shelf Movement	Sliding			
9	Splice Trays Included, quantity	1 , Plastic Type			
10	Pigtails	6 Numbers LC Single Mode with each LIU			
11	Rack Type	EIA 19 in			
12	Color	Grey			
13	Regulatory Compliance/Certifications	Compliant as per SVHC/RoHS			

SI No	Characteristics	Description	Compliance (Yes/No)
1	Product	Fiber Optic Termination Panel, 1U, 19 in, 6 Port LC	
2	Ports	8 Ports	
3	Connector Type	LC	
4	Material Type	Steel/CRC Powder Coat	
5	Functionality	Patching	
6	Interface Feature, front	Standard	
7	Interface, front	LC .	
8	Shelf Movement	Sliding	
9	Splice Trays Included, quantity	1 , Plastic Type	
10	Pigtails	8 Numbers LC Single Mode with each LIU	
11	Rack Type	EIA 19 in	
12	Color	Grey	
13	Regulatory Compliance/Certifications	Compliant as per SVHC/RoHS	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Product	Fiber Optic Termination Panel, 1U, 19 in, 6 Port LC	
2	Ports	12 Ports	Walliam e
3	Connector Type	LC	
4	Material Type	Steel/CRC Powder Coat	
5	Functionality	Patching	
6	Interface Feature, front	Standard	
7	Interface, front	LC	
8	Shelf Movement	Sliding	The state of the s
9	Splice Trays Included, quantity	1 , Plastic Type	
10	Pigtails	12 Numbers LC Single Mode with each LIU	
11	Rack Type	EIA 19 in	
12	Color	Grey	
13	Regulatory Compliance/Certifications	Compliant as per SVHC/ RoHS	

	Fiber Patch Panel - 24 Port LIU fully loaded with Pigtails - LC Connectors				
SI No	Characteristics	Description	Compliance (Yes/No)		
1	Product	Fiber Optic Termination Panel, 1U, 19 in, 24 Port			
2	Ports	24 Ports should be loaded with adaptors			
3	Connector Type	LC			
4	Material Type	Steel/CRC Powder Coat			
5	Functionality	Patching			
6	Interface Feature, front	Standard			
7	Interface, front	LC	And the second		
8	Shelf Movement	Sliding			
9	Splice Trays Included, quantity	1 , Plastic Type			
10	Pigtails	24 Numbers LC Single Mode with each LIU			
11	Rack Type	EIA 19 in			
12	Color	Grey			
13	Regulatory Compliance/Certifications	Compliant as per SVHC/ RoHS			

		JUNCTION BOX	G
SI No	Characteristics	Description	Compliance (Yes/No)
		 Make and Model: Mandatory to provide Make & Model Details of Product: Specifications website and URL (web address) link: Mandatory to provide Product Specifications website and its URL link 	
		Dimension : Shall be 24x24x14 Inches (WxHxD) or better	
	A PART OF	 Environmental Rating protection: Shall be rated for IP 56 or higher protection for Pole mount 	2 N
		Housing : Carbon steel	
		 Coating : DIN power coated 	
	mar of the more)	Color : Gray	
	Ten eva-	 Front Door : Single door with proper Gasket protection to protect from Water entry & dust 	
1	JUNCTION BOX	Ventilation- Shall have air vents with fan and hood	
		 Standards : UL/cUL/IEC 	
		 Grounding: shall have provision for grounding 	
		 Hinge pins : shall have hinge pins for easy door removal 	
		 Mounting panel : Zinc galvanized mounting panel 	
		 Enclosure edge / flange : Shall have Water and Dust proof edge flange trough collar diverts liquids, dirt 	
	TO TO	 Accessories / parts to accommodate the termination of the network cable, LAN Surge Protector, Power Surge Protector, Power adapter for Illuminators etc. 	
	ii ii	 Bolts, Nuts & fixtures: Shall provide Stainless Steel accessories to Mount junction box on the poles 	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Box type	Factory fabricated sheet metal enclosure with ISI mark	
2	Design and Size / Dimension	Distribution box shall be designed & fabricated to accommodate minimum Nos of Single Phase Two pole MCBs as indicated in the BOQ and Bus bar with Neutral link & Earthing strip	
3 · · ·	Body Finish	Body Finish: Powder coat	
4	Voltage Rating	Voltage rating: 220 to 270V AC, 50Hz	
5	Current Rating	Current rating: 5Ams to 20Amps	
6	Inlet & Outlet	Inlet & Outlet: Inlet shall accommodate upto 16Amps (2.5Sqmm) 3 core power cable with groumet and each outlet shall accommodate 5Amps / 6Amps (1.5Sqmm) 3 core power cable with groumet of minimum Nos as indicated in the BOQ	
7	No of Inlet & Outlets	No. of Inlet & outlet: inlet - 1 No and outlets Nos as indicated in the BOQ	

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Miniature Circuit Breaker (MCB)				
SI No	Characteristics	Description	Compliance (Yes/No)	
1	No. of MCBs in each Power distribution Box	10 Nos		
2	No. of Pole	Two pole MCBs		
3	Rated Capacity	6Amps, 230-240V AC, 50Hz		
4	Standard Conformity	IEC 60947-1 / ISI/CE		

A CONTRACTOR		8 Port Non-POE switch	
SI No	Characteristics	Description	Compliance (Yes/No)
1	Switch hardware	8 x10/100/1000 Base-T Base-T & 2 x 1G Base-X SFP ports	
2	Higher Availability	Shall support 802.17 / ITU-T G.8032 for 50ms ring protection with seamless integration with other switches	
3	Layer 2 - 3 Features	 2K configurable VLAN's IGMP snooping (IGMPv1, v2 and v3) MLD snooping (MLDv1 and v2) Should support IPV4: Static routing, RIPv2 UDLD Active Fiber Monitoring detects tampering on optical links The switch shall have IPv6 Ready logo certified from 	
4	Security	day one. DHCP snooping IP source guard and Dynamic ARP Inspection (DAI) FIPS Dynamic VLAN assignment Tri-authentication: MAC-based, web-based and IEEE 802.1X	
		DOS attack prevention	
5	Management	 CLI, GUI, SNMPv1,2 & 3, console port Switch Should support Zero touch recovery Switch Should support Zero touch provisioning 	
6	Environmental	Min of 0 to 50 Degrees centigrade operating temperature Humidity: 5% to 90% non-condensing or better	
7	Certifications	UL, cUL, EN, ROHS, CISPR, FCC Class A, VCCI Class A	
8	Integration	For ease of integration, all switches, SFP Modules shall be from same OEM	

		8 Port POE+ Industrial Switch	
SI No	Characteristics	Description	Compliance (Yes/No)
1	Switch hardware	a) 8 x1G Base-T PoE+ Ports b) Additional 2 x1G /10G SFP ports with redundant/Dual power inputs for providing better reliability. (c) DIN Rail Mount.	
	SFP	Populated with 2 Nos of 1000LX (LC) single-mode, 10km	đ
	РоЕ	Should support PoE+ as per IEEE 802.3at with PoE budget of 240watt	
2	Higher Availability	Shall support ITU-T G.8032 for 50ms ring protection with seamless integration with other switches	
3	Layer 1 Features	Uninterrupted POE to the connected outdoor CCTV cameras during switch reboot. Active Fiber Monitoring detects tampering on optical links	
4	Layer 2 - 3 Features	 2K configurable VLAN's IGMP snooping (IGMPv1, v2 and v3) MLD snooping (MLDv1 and v2) Should support IPV4: Static routing, RIPv2/ Equivalent UDLD The switch shall have IPv6 Ready logo certified from day one. 	
5	Security	 DHCP snooping IP source guard and Dynamic ARP Inspection (DAI), FIPS 140-2/ FIPS 180 Tri-authentication: MAC-based, web-based and IEEE 802.1X DOS Attack prevention 	
6	Management	 CLI, GUI, SNMPv1, 2 & 3, switch should support Open Flow v1.3 or higher for SDN functionality. Switch should support Zero touch recovery. Switch should support Zero touch provisioning. 	
7	Environmental	 Min of -10 to 75C Degrees centigrade operating temperature or better Humidity: 5% to 95% non-condensing 	

8	Certifications	 IP30 rating Freefall IEC60068-2-31 Shock IEC60068-2-7 Vibration IEC60068-2-6 EMC: EN 55024/55035 EN 61000-6-2 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-5 Lighting/surge immunity (Surge) IEC 61000-4-6 EN55032 Electromagnetic Emissions: CISPR 32, EN 61000-6-4
9	Integration	For ease of integration, all switches, SFP Modules shall be from same OEM

		24 Port POE+ Switch	G "
SI No	Characteristics	Description	Compliance (Yes/No)
	Switch hardware	24 x10/100/1000 Base-T POE+ 4 x 1G Base-X SFP ports	
1	РоЕ	Should support PoE+ as per IEEE 802.3at with PoE budget of 370watt	
2	Higher Availability	Shall support 802.17 / ITU-T G.8032 for 50ms ring protection with seamless integration with other switches	
3	Layer 2 - 3 Features	2K configurable VLAN's IGMP snooping (IGMPv1, v2 and v3) MLD snooping (MLDv1 and v2) Should support IPV4: Static routing, RIPv2 UDLD Active Fiber Monitoring detects tampering on optical links The switch shall have IPv6 Ready logo certified from day one.	
4	Security	DHCP snooping IP source guard and Dynamic ARP Inspection (DAI) FIPS Dynamic VLAN assignment Tri-authentication: MAC-based, web-based and IEEE 802.1X DOS attack prevention	
5	Management	CLI, GUI, SNMPv1,2 & 3, console port Switch Should support Zero touch recovery Switch Should support Zero touch provisioning	*
6	Environmental	Min of 0 to 50 Degrees centigrade operating temperature Humidity: 5% to 90% non-condensing or better	
7	Certifications	UL, cUL, EN, ROHS, CISPR, FCC Class A, VCCI Class A, EN 55032	
8	Integration	For ease of integration, all switches, SFP Modules shall be from same OEM	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Switch Hardware	 24 x 1Gbps BaseX SFP ports and 4 x 10 Gbps SFP+ ports fully loaded with LR Modules 512 MB SDRAM 128 MB flash memory Switching fabric: 56 Gbps or more Forwarding rate: 41 Mpps or more 	
2	Layer 2 Features	 2K configurable VLAN MSTP and RSTP spanning tree support IPv4 and IPv6 support IGMP Snooping DHCP snooping support Should support Ring Resiliency as per REP/ ERPS / IEEE 802.17 or equivalent technology. 	
3	Security	Should support ACLs IP source guard Dynamic ARP Inspection (DAI) MAC address filtering and MAC address lockdown Tri-authentication: MAC-based, web-based and IEEE 802.1x FIPS Intrusion detection system (IDS) and Intrusion prevention system (IPS) to prevent the threat of fiber optic system tampering and wiretapping	
4	Management:	 Switch should support Centralized management Switch should support Auto backup Switch should support Auto upgrade Switch should support Zero touch management Switch should support Auto recovery Switch should support Auto provisioning CLI, GUI SNMP /SSH Web based IPv6 ready logo certified from day one USB or equivalent interface in built 	
5	Safety standards:	UL, EN, CE, ROHS and IEEE 802.3az, ROHS.	
6	Operating temperature	Operating temperature: 0°C to 50°C.	
		Operating Humidity: 5% to 90%.	
7	Certification	UL, cUL, EN, ROHS, CISPR, FCC Class A, VCCI Class A, EN 55032	
8	Power supply	230V internal power supply	
9	Integration	For ease of integration, all switches, SFP Modules shall be from same OEM	

SI No	Characteristics	Description	Compliance
1000			(Yes/No)
		The Switching System should support Physical or Modular or Virtual Switching System (VSS) or Distributed Virtual Switching System or Virtual Switching Framework (VSF) to provide System Virtualization.	
		The Switching System should provide for minimum two, or more, physical Switches to operate as a single logical virtual switch with stacking bandwidth of 40Gbps or more	
1	Architecture	The Virtual Switching System (VSS) / equivalent technology shall support virtualization of switch locally and geographically diversified locations with "split brain/dual master" avoidance functionality during stack links/modules failure.	
		Mix of various port combination switches, PoE and Non PoE switches should be stacked together and support 8 switches in a stack.	
		VSS /equivalent technology shall support virtual-mac address for seamless switchover to potential master when master node fails	
		VSS /equivalent technology shall support seamless firmware upgrade using ISSU or rolling upgrade	
2	Switching Capacity	The Switching Capacity of the Switch should be non blocking/wire speed based on the port requirements.	
3	Forwarding Capacity or Throughput	The Forwarding Capacity(Mbps) or Throughput of the Edge Switch shall be in compliance with non blocking switching capacity	
4	Number of Ports/Slots required from day one	Each Edge Switch shall have minimum 20 x 10/100/1000 & 4 x 1/2.5/5 Gbps RJ45 ports and 4 x 1/10G SFP+ ports from day-1 populated with 1 x 10G LR SM Transceivers with dual power supply from day 1.	
Layer 2	Functionality		
5	IEEE 802.3ad, IEEE 802.1AX	The Switching System should support Industry Standard Link Aggregation.	ar u
6	Jumbo Frames	The Switching System should support Jumbo Frames support more than 9K Bytes on 1G and 10G Ports	Transfer and
7	Storm Control	The Switching System should support broadcast, multicast and unknown unicast limiting to prevent degradation of Switching System performance	
8	IEEE 802.1Q	The Edge Switch should support port, subnet based 802.1Q VLANs and Private VLANs or equivalent. The Switching System should support 1K or more active VLANs.	
9	Layer 2 Scale	The Switching System should support minimum 16K MAC addresses, 8 Nos. of links per link aggregation and must support more than 64 link aggregation.	

10	Resiliency protocols	The Switching System must support IEEE 802.1w RSTP and IEEE 802.1s MSTP, G.8032 for fast convergence.	
11	Multi Chassis or Switch Ether Channel	The Switching System must support Layer 3 Multi switch/Chassis Link Aggregation feature across the VSS/stack and work with any downstream Switching System and server from various vendors.	
Layer 3	Functionality		
12	Routing Protocols	The Switching System should support routing protocol IP v4 & IPV6 Static routing, OSPFv2, OSPFv3, BGPv4,The Switching System should also support Multicast Routing Protocols (IPv4 PIM and IPv6 PIM)	
13	FHRP Support	The Switching System should support HSRP/ VRRP for Ipv4 and Ipv6. It must also support DHCP Server and Relay for Ipv4 and Ipv6.	
14	No. of Route Entries	The Switching System Switching System should support minimum 1024 Ipv4 Route entries, minimum 1024 Ipv6 route entries.	
Security	Features		
15	Various type of ACLs	The Switching System should support various type of ACLs like MAC based ACLs, Port based ACLs, VLAN based ACLs and Layer 3 ACLs. Time-based ACLs, Event-based ACLs	
16	Integrated Security	The Switching System should support integrated security features like DHCP snooping with Option-82, Dynamic Arp Inspection, IP Source Guard, Ipv6 Router Advertisements (Ras)	
17	MAC Address Filtering	The Switching System should support MAC Address Filtering based on source and destination address	
18	AAA	The Switching System should support Authentication, Authorization, and Accounting (AAA), COA. It must support RADIUS and TACACS+ protocol as well.	
19	Access Control Entries	The Switching System should support up to 1K ACL rules per Switching System. It should support Security and QOS ACL's.	
20	Port Security	The Switching System should support Port-security.	
21	Layer-1 Security	Intrusion detection system (IDS) and Intrusion prevention system (IPS) to prevent the threat of fiber optic system tampering and wiretapping	
Multicas	st		
22	IGMP	The Switching System should support IGMP v1, v2 & v3 and MLD Snooping v1, v2, MSDP.	
Manage	ment		V.
23	Management interface support	 The Switching System should support Syslog, SCP, SSHv2, Telnet, OOB Management port or Console Port. CLI, GUI, SNMPv1,2 & 3, switch should support OpenFlow v1.3 or higher for SDN functionality Zero touch recovery Zero touch provisioning 	
24	SNMP	The Switching System should support SNMP v1, v2 and v3	

*		Switch should support Open Flow / SDA or equivalent SDN functionality for LAN Automation from day 1	
24 SDN support		Centralized management platform to be proposed to automate LAN/WLAN/WAN feature set and cyber security threat prevention	
Ethernet :	Standard	and independent of the first of	1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
25	Supported Standards	 IEEE 802.1D Bridging and Spanning Tree IEEE 802.1p QoS/CoS IEEE 802.1Q VLAN Tagging IEEE 802.1w Rapid Spanning Tree IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1AB Link Layer Discovery Protocol IEEE 802.1x IEEE 802.3ad Link Aggregation with LACP IEEE 802.3x Flow Control IEEE 802.3ab 1000BASE-T IEEE 802.3z Gigabit Ethernet RFC 2460 Ipv6 RFC 2461 / RFC 4861 Neighbor Discovery for Ipv6 RFC 2462/RFC 4862 Ipv6 Stateless Address Auto configuration RFC 2463 / RFC 4443 ICMPv6 	
26	Licenses	Licenses required to run all the above features must be included from day one.	
		UL, CUL, EN, ROHS FIPS 140-2	
27	Certifications	Ipv6 Ready logo certified from day one	
28	Operating temperature	0°C to 45°C	
29	Operating humidity	5% to 90%	
30	Mounting	Switching System must be rack mountable. Rack mounting kits and accessories should be supplied.	
31	Cables & Accessories	All necessary cables, power & accessories should be supplied	
32	Other Conditions	For ease of integration, all switches, SFP Modules shall be from same OEM. Same modular operating system shall be supported across Core, Distribution, Access Layer Switches along with standard CLI / similar CLI	
		TAC Support 24/7 and Warranty for 5 years with Advanced Hardware Replacement with 5 year software support	
33	Manufacturing	Switches should not be manufactured in land border sharing countries with India	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Module Type	SM (Single Mode)	
2	Wavelength(nm)	1310	
3	Fiber Type	9/125 Single mode	
4	Typical TX Power (dBm)	0 to -5	
5	Typical Rx Sensitivity	3 to -34	
6	Typical Range (Km)	20 (dBm)	
7	Power supply	12 to 48 V DC	
8	Power consumption	≤10 W	
9	Operating Temperature	-10°C ~ 60°C	,
10	Humidity	5%~95 % (no condensation)	

	Duplex Patch cord, SM, LSZH				
SI No	Characteristics	Description	Compliance (Yes/No)		
1	SC, FC, ST, LC, E2000				
2	Ultra (UPC)/Angle(APC)	IL (Typical) = 0.20 dB			
		IL Maximum = 0.40 dB			
3	Ultra (UPC)	RL Typical55 dB			
		RL Minimum45dB	7 447 4 4 4 4 4 4 4 4 4		
4	Angle(APC)	RL Typical65 dB			
		RL Minimum60dB			
5	LC Comply	IEC 61754-20			
6	SC Comply	TIA/EIA 568, IEC 874-10			
7	FC Comply	IEC 60874-7			
8	ST Comply	TIA/EIA 568, IEC 874-14			
9	E2000 Comply	IEC 61754-15	1		
10	The insertion loss	test acc.to IEC 61300-3-4			
11	The return loss	test acc.to IEC 61300-3-6			

	Cat 6 UTP Patch Cord, LSZH				
SI No	Characteristics	Description	Compliance (Yes/No)		
1	Plug Insertion Life	minimum 750 times			
2	Plug Retention Force	minimum 133 N			
3	Operating Temperature	-10 °C to +60 °C			
4	Flammability Rating	UL 94 V-0			
5	Cable	24AWG Stranded			
6	Connector	RJ 45			

	Hot Dip Galv	vanized Outdoor Pole (6 Meters)	
SI No	Characteristics	Description	Compliance (Yes/No)
1	Material	Aluminum / MS	
2	Height	6 Meters	
3	Metal protection treatment for Monopole	HOT DIP Galvanized confirming BS EN ISO 1461 and two or more layers of epoxy coating	
4	Accessories	SS (Stainless Steel) Screws and Nuts for fixing the Arms, Outdoor Junction Box etc.	
5	Accessibility option for installation and maintenance of cameras:	1. Provision for Outdoor Junction fixing on the Pole to be provided 2. Provision for Cable Entry: Suitable holes to be done for cable entry at bottom (input cables) and top(camera) before Galvanized coating 3. Gasket/groumet for cable entry holes: Suitable Gasket/groumet should provide to protect of water Seepage 4. Outreach Arm: Arms fixed to Poles for mounting the Cameras 5. Length of the Arm: Length 1m with mounting brackets for outdoor fixed bullet cameras and Speed dome cameras (according to site condition)	

Pole Earthing Kit			
Sl No	Characteristics	Description	Compliance (Yes/No)
1	Material	Maintenance free rod earth pit	
2	Rod Construction	Low carbon copper coated earth rod of 2000 MM electrode having diameter of 17.2 mm with copper coating thickness of 250micron tested as per IEC 62561-2	1111
3	Clamp	Universal clamp made of SS to connect rod with flat conductor	
4	Earthing Compound	Earth conductivity enhancing compound shall be of 25 kg/pit tested as per IEC 62561-7,TCLP tested The compound should be highly conductive non-corrosive compound around rod electrode to get the desired earth resistance value as low as possible and as per soil condition but not less than 3 meters.	
5	Earth Inspection Chamber	The above arrangements shall be provided with Heavy duty earth chamber of 5000kg load bearing capacity to ensure the safety of earthing system	
6	Certification	UL Listed & CPRI Certification	

	Full HD 55 Inch Monitor Display				
SI No	Characteristics	Description	Compliance (Yes/No)		
		Diagonal Size : 55 Inch (Minimum)	-		
		Display Type and Back light : LCD with backlit LED or better			
		Resolution: 1920 x 1080 at 60Hz or better			
		Brightness: 500 Nits or better			
	Full HD 55 Inch Monitor Display	Contrast Ratio: 4000:1 or better			
		Viewing Angle: 178 x 178 deg			
		Display Colors: 10 bit, 1.07 Billion or better			
1 -		Built-In Speakers: 10W + 10W or better			
		Input Connections : DP, HDMI x 2, USB x 2, Stereo Jack (mini)			
		External Control Ports : RJ45			
		Power :100 - 240 V AC, 50 Hz			
		Accessories : Mounting kit, VESA Mount , Power cable, HDMI/DP cable with5 meter length			
		Energy Star Certified.			

SI No	Characteristics	Description	Compliance (Yes/No)
		Form Factor: Tower	
		Processor: Dual x Intel Xeon 12	
		Core (24 Core Single), 3.8GHz, HT,	
		DDR4-2933 or better shall be offered	
		Chipset: Intel Chipset on OEM motherboard	
		Memory: 128 GB (8x16GB) 2933MHz DDR4 RDIMM ECC	
		memory spread across all memory	
7		channels or better configuration shall be offered	
		HDD: M.2 512GB x 2 PCIe NVMe Class 40 Solid State Drive	
		Storage Controller: Raid Controller with support for RAID 0 / 1.	
		Optical Drive: Internal Optical Disk Drive, Capable of reading and writing both CDs as well as Single & dual layered DVDs.	
		Graphics Card : NVIDIA Quadro 4 GB	
		Network Card: Integrated Gigabit Network Interface	
1	WORKSTATION	Ports : Front: 2 USB, Rear: 4 USB, Audio in, out and Microphone shall be offered	
		Keyboard : USB Standard keys	
		Mouse: USB Optical scroll mouse with Mouse pad	
		Operating System: Microsoft Windows 10 Professional 64 bit with recovery media	
		Offered workstation shall support dual monitor configuration. Required video cables and / convertors to be offered along with the monitor.	
3		OS Certification: Systems should be certified for Microsoft Windows and Red Hat Enterprise Linux (RHEL) 64 bit latest version.	
	90	Cooling – System shall be configured with cooling fans for Power supply,	
		CPU heat sink, chassis rear or chassis front	
		Power – Power supply with 80% or	1
		better efficiency, Power Supply rating: 220 volt/50 Hz shall be offered	
		Safety Certification: FCC for EMI and	

	Joystick for PTZ Control			
Sl No	Characteristics	Description	Compliance (Yes/No)	
1	Connection	USB Port connected directly to the workstation/PC		
2	Joystick	Hall-effect joystick with 4 axis emulation		
3	Specification	X/Y: for camera view positioning Z: for zoom in and out programmable push-button, on handle and on base housing	* * * * * * * * * * * * * * * * * * *	
4	Centering	Single spring, Omni-directional		
5	System Integration	Windows		
6	Operating temperature	0 °C to +45 °C		

SI No	Characteristics	Description	Compliance (Yes/No)
	Credential	Biometric - Face	
1.		RF Option - 13.56MHz MIFARE	
		RF Read Range - 50 mm	
		Recognition Distance - 0.5m — 1.3m (19.7" — 51.2")	
		Recognition Height - 140cm — 190cm (55.1," — 74.8")	
2.	Face	Matching Speed - Less than 0.5 sec	
		Live Face Detection (Anti-Spoofing) - Supported	
		Max. User (1:1) – 100000 or better	***
	-	Max. User (1:N) - 50000 or better	
3.	Capacity	Max. Text Log - 5000000 or better	-
		Max. Image Log - 50000 or better	
	Interface	Ethernet - 10/100 Mbps, auto MDI/MDIX	
		RS-485 - 1ch Host or Slave (Selectable)	
4.		Wiegand - 1ch Input or Output (Selectable)	
		TTL Input - 2ch Inputs	
		Relay - 1 Relay	
		USB - USB 2.0 (Host)	101
5.	Power	Voltage: DC 12V — Current: Max. 2.5 A POE(Optional)	
6.	Power Adaptor	24 V /2.5 A DC Power Adaptor	
9		CPU - 1.8 GHz Dual Core + 1.4 GHz Quad Core	
		Memory - 16GB Flash + 2GB RAM or better	
		LCD Type - 7" IPS color LCD or better	
	, x	LCD Resolution - 800 x 1280 pixels or better	
		Sound - 16bit	
7.	General	Operating Temperature20°C — 50°C (-68°F — 122°F)	(6)
	=	Operating Humidity - 0% — 80%, non-condensing	
		IP Rating - IP65 or better	
		Certificates - CE, FCC, KC, RoHS, REACH, WEEE	

		9U RACK	
SI No	Characteristics	Description	Compliance (Yes/No)
(4)	Frame Type &	9U Rack Welded Steel Folded Frame	
1.	Dimension	9U 19", 480x600x440 mm, (H x W x D), 370mm	
2.	Load Capacity	Static Load typically 30 Kg	
3.	Side Panels	Detachable Side Panels 480mm / 9 U Fully Vented	
4.	Fixed Shelf	Cantilever Shelf formed Steel and Power Coated.	= H **
5.	Cooling Fan	Fan housing unit shall consist of 1 Nos of Low Noise Fans with 6 inch fitted at underneath of top cover. The fan housing units shall be pre-wired with suitable control switch and indicating Lamps.	
6.	Rack Power Distribution Units	2U Standard Horizontal Rack Mount Power distribution unit with 6 Nos x Indian 5/15A Round 3 Pin, 230VAC Sockets. (1 Nos distribution unit with each rack)	
7. –	Earthing Strip	Grounding and bonding as per UL Standards	
8.	Cable Entry	Cable entry shall be at Bottom side with cable entry cutouts covered with rubber grommets	
9.	Rack Color	Black	
10.	Rack Standard	Conforms to DIN 41494 or Equivalent EIA/ISO/EN CEA Standard	
11.	Certifications, Environmental and Safety Requirements	 Racks should be manufactured by ISO9001:2015, ISO14001:2004 & OHSAS18001:2007 Certified company and should have proper EHS Policy. Products must be UL Certified The rack should comply minimum of IP 20 rating for protection against touch, ingress of foreign bodies and ingress of water. The enclosure should both protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition. 	i i

SI No	Characteristics	Description	Compliance (Yes/No)
	Frame Type & Dimension	42U Rack Welded Steel Folded Frame	(1es/No)
1		800mm(Overall) x 800mm(Overall) x 42U (Usable) (WXDXH)	
2	Load Capacity	Static Load: 750 KGs or more	
3	Front Door	Lockable Toughened Glass Door	
4	Rear Door	Lockable Steel Door - Vented / Perforated	
5	Side Panels	Detachable Side Panels 800mm / 42U Fully Vented	
6	Fixed Shelf	Fixed shelf (800mm x 800mm) formed Steel and Power Coated	
7	Cooling Fan	Fan housing unit shall consist of 4 Nos of Low Noise Fans with 6 inch fitted at underneath of top cover. The fan housing units shall be pre-wired with suitable control switch and indicating Lamps.	
8	Rack Power Distribution Units	Zero U Standard Vertical Rack Mount Power distribution unit with 12 Nos x Indian 5/15A Round 3 Pin, 230V AC Sockets. (2 Nos distribution units with each rack)	
9	Earthling Strip	Grounding and bonding as per UL Standards	
10	V-Cable Organizer	19 inch Adapter Kit / 42U / Closed /Door / 100x150/2/Black	
11	H-Cable Organizer	1U Standard 19" Horizontal Cable organizer with loops (2 numbers with each rack).	
12	Cable Entry	Cable entry shall be at Bottom side with cable entry cutouts covered with rubber grommets.	
13	Standard Mounting	Caster Wheels (2 with Brake & 2 without Brake)	
14	Rack Color	Black	Mark III
15	Rack Standard	Conforms to DIN 41494 or Equivalent EIA/ISO/EN CEA Standard	Tanky .
16	Certifications, Environmental and Safety Requirements	 Racks should be manufactured by ISO9001:2015, ISO14001:2004 & OHSAS18001:2007 Certified company and should have proper EHS Policy. Products must be UL Certified The rack should comply minimum of IP 20 rating for protection against touch, ingress of foreign bodies and ingress of water. The enclosure should both protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition. 	

SI No	Characteristics	Description	Compliance (Yes/No)
-1	Product Category	Copper Control Cables	
2	Size	2.5 sq mm	
3	Core	3 Core	
4	Conductor		
4.1	Material	Plain annealed Copper as per Class 2 of IS:8130/2013	
4.2	Shape of the conductor	Stranded Circular	with the same
5	Insulation		
5.1	Material	XLPE as per IS 7098(Pt-1)/88	
5.2	Nominal thickness (mm)	0.7	
5.3	Core Identification	Red, Yellow and Blue	
6	Inner Sheath		
6.1	Material	Extruded PVC Type ST2 as per IS:5831/84	
6.2	Minimum thickness (mm)	0.3	
7	Armoring		
7.1	Material	Galvanized Steel	
7.2	Type of armoring	Round Wire	
7.3	Nominal size of armor (mm)	1.4	
8	Outer Sheath		
8.1	Material	PVC Type 'ST2' as per IS:5831/84	
8.2	Thickness (mm)	1.24 (Min.)	
8.3	Color of outer sheath.	Black	
9	Electrical Parameters		
9.1	Max. a.c. resistance of conductor at 90° C (ohm/km)	9.45	
9.2	Impedance of cable (ohm/km)	9.45	
9.3	Approx. Cable Capacitance (mfd/km)	0.21	
9.4	Maximum conductor temperature under normal operating conditions	90°C	
9.5	Maximum conductor temperature at the termination of short circuit	250°C	
9.6	Current Rating (A)	34 Amp	
10	Applicable Standard	IS 8130/2013,IS 7098 Part I/88, IS 5831/84, IS3975/88 etc.	

	3 Core Unarmored Power Cable 2.5 Sqmm			
SI No	Characteristics	Description	Compliance (Yes/No)	
1	Type	Indoor Application		
2	Number of Cores	3 Cores		
3	Nominal Area	2.5 Sqmm		
4	Current Carrying Capacity	18A or better		
5	Conductor Material	Copper		
6	Insulation Material	PVC with 0.7mm thickness or better	-	
7	DC resistance	Maximum 7.98 ohm/km or better		
8	Voltage rating	shali have rating up to 1100Volts		
9	Standards	Cable shall be IS 694 and ISI/ISO standard Mark		

CLN-		A UPS with 2 hrs Backup	Compliance
SI No	Characteristics	Description	(Yes/No)
1	UPS KVA	6 KVA	
2	Power Factor	0.8 or better	74 H
3	Topology	Online	
4	Ups Type	Double conversion online	
5	Output Waveform	Sine wave	
6	Eco Mode Efficiency	>= 97%	
7	Battery type	External battery system	
8	Battery Charger Power	2340 W rated	
9	Input Voltage Range (100% load)	176-300V	
10	Input Voltage Range (60% Load)	110-300V	
11	Input Frequency Range	40-70Hz	
12	Input Power Factor	0.98	
13	Input Protection	Circuit breaker	
14	Output Voltages	220, 230, 240V (Selectable)	
15	Overload capacity	110% - Infinite,	
		125% - 1 minute,	
		150% - ½ minute,	
		>150% to 175% - 25 line cycles,	
		>175% - 5 line cycles	
16	Output voltage THD	<3% with linear load	i easimir i
17	Crest Factor	3:1	
18	Output frequency	50/60 Hz +/-3Hz	
19	Form factor	2U Rack mounting	
20	Operating Temperature range	0 to 40°C with full load support (no de rating) 0 to 50°C with 80% de rating	
21	UPS Network monitoring	SNMP	
22	UPS Paralleling	1+1	
23	Bypass Type	Internal (automatic and manual)	
24	Certification	BIS	I I I I I I I I I I I I I I I I I I I
25	EMI	CISPER22 Class A	
25	EPO	Yes	
26	Battery Reverse Polarity protection	Yes	
27	EMI	CISPR22 Class A	
28	Standards	IEC61000-2-2-edn-2 IEC61000-3-12-edn1 EN/IEC 61000-4-2 EN/IEC 61000-4-3-edn 3 ,Level 3 IEC standard 61000-4-4 IEC-61000-4-5, IEC61000-4-6 EN/IEC 61000-4-8-edn 1	

SI No	Characteristics	Description	Compliance
31 110			(Yes/No)
1	UPS kVA	1 KVA	
2	Main Input Voltage	230 V	
3	Other Output Voltage	220 V 240 V	
4	Rated Power In W	800 W	
5	Rated Power In Va	1000 VA	
6	Input Connection Type	India 3-pin 6A	
7	Output Connection Type	4 India 3-pin 6A	
8	Battery Type	Lead-acid battery	
9	Battery Recharge Time	6 h	
10	Battery Charger Power	54 W rated	-12
11	Ups Type	Double conversion online	
12	Network Frequency	4070 Hz	
13	Input Voltage Limits	110280 V half load	
14	Switching Current Capacity	10 A	
15	Maximum Configurable Power In Va	1000 VA	
16	Maximum Configurable Power In Watt	800 W	
	Output Frequency	50/60 Hz +/- 3 Hz sync to mains	
17	Wave Type	Sine wave	
18	Efficiency	90 % (full load) 88 % (half load)	
19	Harmonic Distortion	Less than 2 %	
20	Crest Factor	03:01	
21	Product Certifications	BIS	
22	Ambient Air Temperature For Operation	040 °C	
23	Relative Humidity	095 %	
24	Operating Altitude	03000 ft	
25	Ambient Air Temperature For Storage	-2060 °C	
26	Storage Relative Humidity	095 %	

		PVC PIPE	
SI No	Characteristics	Description	Compliance (Yes/No)
1	Туре	Material : Polyvinyl Chloride	
2	Size	PVC Pipe sizes: 1 inch-2.5 inch (As per Cable Requirement)	8
3	Dimensions	Pipe thickness: 2mm to 3mm Grade Thickness	
4	Quality	Highest Quality: Outdoor Industrial Grade Quality.	
5	Standard	ISI mark standard	.30
6	Length	3 meters	(Fall 20)

HDPE PIPE			
SI No	Characteristics	Description	Compliance (Yes/No)
1	Туре	Material : High Density Polyethylene Pipe (HDPE)	
2	Size	HDPE Pipe sizes : 50mm	
3	Dimensions	Pipe thickness : 2.5mm to 3mm Grade Thickness	
4	Quality	Highest Quality: Outdoor Industrial Grade Quality.	
5	Standard	ISI mark standard	

GI Pipe			
SI No	Characteristics	Description	Compliance (Yes/No)
1	MS Steel Round Pipe	3 inch	
2	GI Pipe	Medium (Class B)	
3	Nominal Bore	80 mm	
4	Thickness	4.00 mm	
5	Weight	50.25 Kg	
6	Length	6 Mtrs	
7	Standards	ISI 1239 (Part 1)	

	Single Pole Surge Protector			
SI No	Characteristics	Description	Compliance (Yes/No)	
1	Nominal voltage	230V AC +/- 10%		
2	Max. continuous operating voltage	270V AC or better		
3	Nominal discharge surge current In (8/20μs)	20 kA or better		
4	Max. discharge surge current Imax (8/20μs)	40kA or better		
5	Temperature range:	0°C to +50°C or better		
6 .	Protection type	IP20 or better		
7	Test standards	IEC 61643-11 / EN 61643-11 / UL1449 certified	÷	

		Ethernet (LAN) Surge Protector		
Sl No Characteristics		Description	Compliance (Yes/No)	
1	Casing	Metal/ ABS / PC enclosure or better		
2	Connectors	RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE		
3	Power	Nominal discharge current IN (8/20) micro sec (Line to ground): 2 kA or better Pulse discharge current IMP(10/350) micro sec (Line to Earth): 1kA or better Total discharge current (8/20) micro sec: 8kVA or better Voltage protection level UP Line to Line: <= 20 v (B2-1 kV/25 A) or better Voltage protection level UP Line to Line: <= 90 v (B2-1 kV/25 A-PoE) or better Voltage protection level UP Line to Line: <= 35 v (C1-700V/350 A) or better Voltage protection level UP Line to Earth: <= 700 v (B2-4 kV/100 A) or better Voltage protection level UP Line to Earth: <= 850 v (C2-4 kV/2 k A) or better		
4	Operating conditions	-40 °C to 75 °C or better	P	
5	Approvals	IEC 61643-21 or equivalent		
6	Protection type	IP20 or better		

Cable Route Markers			
SI No	Characteristics	Description	Compliance (Yes/No)
- 1	Туре	Rectangle / Triangle shape with Mounting rod	
2	Size	Suitable for Writing the cables details	
3	Purpose / Application	Installing along the outdoor cable routes above the cable trenches	

SI No	Characteristics	Description	Compliance (Yes/No)
1	Wheel Self Supporting Extension Industrial Aluminum Ladder	Heavy Duty Industrial Ladder with Extendable Self supporting, Wheel Size 8" Diameter. High hinges, tool tray, safety belt, adjustable platform, side support, rope and pulley system for extension & lowering of ladder. Size of openable height 12'ft + 12'ft + 12'ft.	

8 Port POE+ Switch			
SI No	Characteristics	Description	Remarks
1	Switch hardware	8 x10/100/1000 Base-T POE ports & 2 x 1G Base-X SFP ports, Should support PoE+ as per IEEE 802.3at / IEE802.3af with PoE budget of 124 watt	
2	Higher Availability	Shall support 802.17 / ITU-T G.8032 for 50ms ring protection with seamless integration with other switches	, X/
3	Layer 2 - 3 Features	 2K configurable VLAN's IGMP snooping (IGMPv1, v2 and v3) MLD snooping (MLDv1 and v2) Should support IPV4: Static routing, RIPv2/Equivalent UDLD Active Fiber Monitoring detects tampering on optical links The switch shall have IPv6 Ready logo certified from day 	
		one.	
4	Security	 DHCP snooping IP source guard and Dynamic ARP Inspection (DAI) FIPS Dynamic VLAN assignment Tri-authentication: MAC-based, web-based and IEEE 802.1X DOS attack prevention 	
5	Management	 CLI, GUI, SNMPv1,2 & 3, console port Switch Should support Zero touch recovery Switch Should support Zero touch provisioning 	
6	Environmental	Min of 0 to 50 Degrees centigrade operating temperature Humidity: 5% to 90% non-condensing or better	
7	Certifications	UL, cUL, EN, ROHS, CISPR, FCC Class A, VCCI Class A	
8	Integration	For ease of integration, all switches, SFP Modules shall be from same OEM	*)

SI No	Characteristics	Description	Compliance (Yes/No)	
1	Scope of Work as per GeM Tender GEMC/2024/B/5536311 dated 12 Nov 2024 & Corrigendum	Scope of Work document as enclosed in Bid comprising of points from SI No-1 to SI No-32 & points in corrigendum	** *	
2	Other General Terms & Conditions as per GeM Tender GEMC/2024/B/5536311 dated 12 Nov 2024 & Corrigendum	Other General Terms & Conditions as enclosed in Bid comprising of points from SI No-1 to SI No-10, Annexure A (Integrity Pact) and Appendix A (EMD) & points in corrigendum.		





Bid Number/बोली क्रमांक (बिड संख्या): GEM/2024/B/5536311 Dated/दिनांक : 12-11-2024

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण		
Bid End Date/Time/बिड बंद होने की तारीख/समय	12-12-2024 17:00:00	
Bid Opening Date/Time/बिड खुलने की तारीख/समय	12-12-2024 17:30:00	
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	180 (Days)	
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Defence	
Department Name/विभाग का नाम	Department Of Defence Research & Development	
Organisation Name/संगठन का नाम	Office Of Dg (ecs)	
Office Name/कार्यालय का नाम	******	
Total Quantity/कुल मात्रा	3	
ltem Category/मद केटेगरी	Supply of CCTV Surveillance System (As per List of Deliverables), Installation and Commissioning of CCTV Surveillance System including Turnkey Jobwork (As per Scope o, Comprehensive AMC of CCTV Surveillance System for a period of 4 years (As per Scope of Work)	
GeMARPTS में खोजी गई स्ट्रिंग / Searched Strings used in GeMARPTS	Comprehensive AMC of CCTV Surveillance System for a period of 4 years (As per Scope of Work)	
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Category not available on GeM for the text string uploaded by the buyer	
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	 Small CCTV Surveillance System (V3) Small CCTV Surveillance System (V4) Camera for CCTV System (V2) 	
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	1200 Lakh (s)	
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	3 Year (s)	
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No	
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No	
बाव विवासिक्टा/ अनुनय पर यथा स स्टाटअप छूट		

Bid Details/बिड विवरण		
Participation restricted to CPSE seller	Yes (This bid is reserved for participation only by CPSE sellers and hence CPSE sellers will be exempted from payment of Transaction charges)	
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria, Bidder Turnover, Certificate (Requested in ATC), OEM Authorization Certificate, Additional Doc 1 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer	
Do you want to show documents uploaded by bidders to all bidders participated in bid?/	Yes	
Bid to RA enabled/बिंड से रिवर्स नीलामी सक्रिय किया	No	
Type of Bid/बिंड का प्रकार	Two Packet Bid	
Primary product category	Supply of CCTV Surveillance System (As per List of Deliverables)	
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days	
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No	
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation	
Financial Document Required/वितीय दस्तावेज की आवश्यकता है।	Yes	
Arbitration Clause	No	
Mediation Clause	No	

EMD Detail/ईएमडी विवरण

Advisory Bank/एडवाईजरी बैंक	State Bank of India
EMD Amount/ईएमडी राशि	11854500

ePBG Detail/ईपीबीजी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
ePBG Percentage(%)/ईपीबीजी प्रतिशत (%)	3.00
Duration of ePBG required (Months)/ईपीबीजी की अपेक्षित अवधि (महीने).	98

- (a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy,/जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने है। एमएसई केटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।
- (b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

Beneficiary/लाभार्थी:

The Director, LRDE LRDE Bangalore, Department of Defence Research & Development, Ministry of Defence (The Director)

MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
1-111 Tarchase Treference/(visilgsilg axia axia	103

MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
MSE Farenase Frerence, Corcup and an an	163

- 1. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
- 2. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
- 3. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.
- OM_No.1_4_2021_PPD_dated_18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.
- 4. Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. Traders are

excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 OM No.1 4 2021 PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

Excel Upload Required/एक्सेल में अपलोड किए जाने की आवश्यकता:

Cost-breakup for CCTV Surveillance System - <u>1729664640.xlsx</u>

Pre Bid Detail(s)

Pre-Bid Date and Time	Pre-Bid Venue
20-11-2024 09:00:00	LRDE, CV Raman Nagar Bangalore 560093

Supply Of CCTV Surveillance System (As Per List Of Deliverables) (1 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अईता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>
Document/क्रता विशिष्ट दस्तावज	

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती / रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	*****	******BANGALORE	1	365

Installation And Commissioning Of CCTV Surveillance System Including Turnkey Jobwork (As Per Scope O (1 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अईता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>
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Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	*****	*******BANGALORE	1	365

Comprehensive AMC Of CCTV Surveillance System For A Period Of 4 Years (As Per Scope Of Work) (1 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>	
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Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	*****	******BANGALORE	1	1460

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

2. Service & Support

Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

3. Forms of EMD and PBG

Bidders can also submit the EMD with Fixed Deposit Receipt made out or pledged in the name of A/C (Name of the Buyer). The bank should certify on it that the deposit can be withdrawn only on the demand or with the sanction of the pledgee. For release of EMD, the FDR will be released in the favour of the bidder by the Buyer after making endorsement on the back of the FDR duly signed and stamped along with covering letter. Bidder has to upload scanned copy/ proof of the FDR along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date/ Bid Opening date

4. Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

5. Generic

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

6. Generic

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- a. Copy of PAN Card.
- b. Copy of GSTIN.
- c. Copy of Cancelled Cheque.
- d. Copy of EFT Mandate duly certified by Bank.

7. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

- 1.RISK & EXPENSE CLAUSE: In case seller fails to honor the contractual obligations within the stipulated delivery period and as amended, Buyer may procure the said contracted goods/services through a fresh su pply order / contract and the defaulting seller has to bear the excess cost incurred, if any
- 2. The bids are invited only from Central Public Sector undertakings like BEL, ECIL, TCIL, ITI etc., as per th e Office Memorandum No: D-32018/3/2015/SSO dated 10 APR 2015 issued by Ministry of Home affairs, GOI

3. Earnest Money Deposit towards Pre Contract Integrity Pact (PCIP): Applicable (Above 20 Crores)

Bidders are required to submit Earnest Money Deposit (EMD) through Bank Guarantee, in f avour of The Di rector, LRDE,Bengaluru, only in Indian Rupee for an amount of 11854500/- as per point No. 8 of PART-I(A) - General Information and Instructions. (Format enclosed at Annexure-A) EMD of the unsuccessful bidders w ill be returned to them, without any interest whatsoever, at the earliest after expiry of the final bid validity and latest on or before the thirtieth day after the award of the Contract. EMD of the successful bidder would be returned without any interest whatsoever after the receipt of Performance cum Warranty Bond from them as called for in the Contract. The conditions of obligations are: I) The EMD will be forfeited if the Bidder withdraws, amends, impairs or derogates from the tender in any respect within the validity period of this Bid. II) If the Bidder having been notified of the acceptance of his Bid by the buyer during the period of its validity a) If the Bidder fails to furnish the required Performance Bond / Performance-cum-Warranty Bond for the due performance of the contract. b) Fails or refused to accept / execute the contract. III) If the bidder

violates the provisions of Pre-Contract Integrity Pact (PCIP) In case original EMD and PCIP are not received on or before "techno-commercial bid opening date and time", bid of such vendors will summarily be reject ed. **This EMD towards PCIP is mandatory and no exemptions are available to any bidder.**

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8. Buyer Added Bid Specific ATC

Buyer uploaded ATC document Click here to view the file.

9. Warranty

Warranty period of the supplied products shall be 3 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

10. Service & Support

Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

11. Service & Support

Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

12. Warranty

Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 7 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imberse the cost of such service / rectification to the Buyer.

13. Forms of EMD and PBG

Successful Bidder can submit the Performance Security in the form of Fixed Deposit Receipt also (besides PBG which is allowed as per GeM GTC). FDR should be made out or pledged in the name of

The Director LRDE

A/C (Name of the Seller). The bank should certify on it that the deposit can be withdrawn only on the demand or with the sanction of the pledgee. For release of Security Deposit, the FDR will be released in favour of bidder by the Buyer after making endorsement on the back of the FDR duly signed and stamped along with covering letter. Successful Bidder has to upload scanned copy of the FDR document in place of PBG and has to ensure delivery of hard copy of Original FDR to the Buyer within 15 days of award of contract.

14. Generic

Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. Click here to view the file

15. Generic

After award of contract - Successful Bidder shall have to get Detailed Design Drawings approved from

buyer before starting fabrication. Successful Bidder shall submit Detailed Design Drawings for Buyer's approval, within 7 days of award of contract. Buyer shall, either approve the drawings or will provide complete list of modification required in the drawings within 10 days. Seller shall be required to ensure supply as per approved Drawings with modifications as communicated by Buyer. If there is delay from buyer side in approval of drawing– the delivery period shall be refixed without LD for the period of delay in approval of Drawing.

16. Generic

Actual delivery (and Installation & Commissioning (if covered in scope of supply)) is to be done at following address

LRDE, DRDO, CV Raman Nagar,Bengaluru 560093 K-site (LRDE), Srinivasapura Road, Kolar S1-Site (LRDE), Ramagondanahalli, Yelahanka Hobli, Bangalore North Taluk, Bangalore S2-Site (LRDE), Thimmasandra, Rajanukunte, Yelahanka Hobli, Bangalore North Taluk

17. Forms of EMD and PBG

Bidders can also submit the EMD with Account Payee Demand Draft in favour of

The Director LRDE payable at Bangalore

Bidder has to upload scanned copy / proof of the DD along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

18. Forms of EMD and PBG

Bidders can also submit the EMD with Banker's Cheque in favour of

The Director LRDE payable at Bangalore

Bidder has to upload scanned copy / proof of the BC along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

19. Generic

Bidder financial standing: The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.

20. Generic

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

21. Generic

End User Certificate: Wherever Bidders are insisting for End User Certificate from the Buyer, same shall be provided in Buyer's standard format only.

22. Generic

Malicious Code Certificate:

The seller should upload following certificate in the bid:-

(a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not

contain Embedded Malicious code that would activate procedures to :-

- (i) Inhibit the desires and designed function of the equipment.
- (ii) Cause physical damage to the user or equipment during the exploitation.
- (iii) Tap information resident or transient in the equipment/network.
- (b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

23. Certificates

ISO 9001: The bidder or the OEM of the offered products must have ISO 9001 certification.

24. Generic

Installation, Commissioning, Testing, Configuration, Training (if any - which ever is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorised Reseller.

25. Generic

Non return of Hard Disk: As per Buyer organization's Security Policy, Faulty Hard Disk of Servers/Desktop Computers/ Laptops etc. will not be returned back to the OEM/supplier against warranty replacement.

26. Past Project Experience

Proof for Past Experience and Project Experience clause: For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the experience criteria:a. Contract copy along with Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed.b. Execution certificate by client with contract value.c. Any other document in support of contract execution like Third Party Inspection release note, etc.Proof for Past Experience and Project Experience clause: For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the experience criteria:a. Contract copy along with Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed.b. Execution certificate by client with contract value.c. Any other document in support of contract execution like Third Party Inspection release note, etc.

27. Generic

Scope of supply includes Training: Number of employees to be trained

5 , Place for Training LRDE and Duration of training 15 days.

28. Generic

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

29. Generic

- 1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.
- 2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.
- 3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/ sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

- 1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
- 2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
- 3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
- 4. Creating BoQ bid for single item.
- 5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
- 6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
- 7. Floating / creation of work contracts as Custom Bids in Services.
- 8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for <u>attached categories</u>, trials are allowed as per approved procurement policy of the buyer nodal Ministries)
- 9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
- 10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
- 11. Creating bid for items from irrelevant categories.
- 12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
- 13. Reference of conditions published on any external site or reference to external documents/clauses.
- 14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, 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. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समास करने और कानून के अनुसार आगे की कानूनी कार्रवाई

का आधार होगा।		
	Thank You/धन्यवाद	