RAILTEL CORPORATION OF INDIA LIMITED
(A Govt. of India Undertaking, Ministry of Railways)

Expression of Interest for Selection of Partner from Empaneled Business Associate for

participation in MP Police Intelligence Bhopal – MPP Dated- 13.11.2024

Name of work:
CCTV Surveillance System for High Court Jabalpur Indore and Gwalior

EOI No: RailTel/WR/MUM/MPP-HC/EOI/2024-25/01-II Dated 5th Feb 2025

Western Railway Microwave Complex, Senapati Bapat Marg, Mahalaxmi, Mumbai-400013

Expression of Interest-Notice

RailTel Corporation of India Ltd
Western Railway Microwave Complex Senapati Bapat Marg, Near Railway Sports
Ground, Mahalaxmi, Mumbai – 400013

EoI Reference No: EOI No: RailTel/WR/MUM/MPP-HC/EOI/2024-25/01-II Dated 5th feb 2025

RailTel Corporation of India Ltd., (here after referred to as "RailTel") invites EOIs from RailTel's Empaneled Partners for the selection of suitable partner for participation in MP Police‖Intelligence Bhopal – MPP Tender No. SB/STORE/2024-25 (535) BHOPAL DATED 13.11.2024 with tender ID-2024_MPP_382181_1 for "CCTV Surveillance System for High Court Jabalpur Indore and Gwalior." The technical and commercial bids shall be submitted through E-Mail in password protected sealed packets as separate PDF documents up to the end date & time mentioned below.

The Details are as under-

1	Last date for submission of Bid response Packet against EOIs by bidders	7th of Feb 2025 at 17:00 Hours
2	Opening of Bid response packet of EOIs	7th of Feb 2025 at 17:15 Hours
3	Number of copies to be submitted for scope of work	One
4	EOI Fees inclusive tax	Nil
5	EMD for Pre-Bid Arrangements	Rs.45,00,000/- (Forty-Five) in the form of DD/Online.
6	Single Packet system	Single Packet System 1. Commercial 2.Technical.

The EMD should be in the favor of RailTel Corporation of India Limited payable at Mumbai through online bank transfer. Partner needs to share the online payment transfer details like UTR No. date and Bank along with the proposal.

RailTel Bank Details: Union Bank of India,

Account No.317801010036605,

IFSC Code - UBIN0531782,

Branch name – Mahalaxmi Branch

Eligible Business Associates are required to direct all communications related to this Invitation for EoI document, through the following Nominated Point of Contact persons:

Level:1 Contact: Sonia Sahu
Position: Sr. Manager/Marketing
Email:Sonia.sahu@railtelindia.com
Contact: +91-9004444159

Level:2 Contact: Viplov Mishra
Position: Dy. General Manager/Marketing
Email: viplovmishra@railtelindia.com

Level:3 Contact: Santosh Parage
Position: General Manager/Marketing
Email: santosh.parage@railtelindia.com

NOTE:

1. Empaneled partners are required to submit soft copy of technical packet through an e-mail at eoi.wr@railtelindia.com duly signed by Authorized Signatories with Company seal and stamp. Mail capacity should not exceed 15 MB. Multiple mails cascaded as chains will be accepted if files are too huge in size and multiple in number. However, all mails should reach before the deadline as prescribed.

2. The EOI response is invited from eligible **Empanelled Partners of RailTel only. The Empanelled partner has to submit its valid empanelment Letter of Intent along with his Bid.**

3. All the document must be submitted with proper indexing and page no.

4. Selected partner's authorized signatory has to give an undertaking they will not engage directly or indirectly their techno-commercial solution/association with any other organization once selected in this EOI for teaming arrangement (during the entire contract period with RailTel). This undertaking has to be given with this EOI Response.

5. Partner has to submit their response as an individual organization only. No consortium is allowed. The Bidder has to be an empanelled partner of RailTel.

6. Transfer and Sub-letting. The Business Associate has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contractor any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.

7. All Bidders to sign and stamp RailTel's EOI and its corrigendum's implying acceptance of all terms and conditions as mentioned and submit the same along with their Bids.

8. Any changes & requests made by the end customer will be unquestionably & without any objection accommodated by the Bidders in their Technical & Price offer submitted against this EoI. Changes include all the technical, financial, format changes and any other changes as applicable and deemed applicable by RailTel.

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1. Introduction about RailTel

RailTel Corporation of India Limited (RailTel), 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 is a subsidiary of Indian Railways.

RailTel has approximately 65000+ 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):

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:
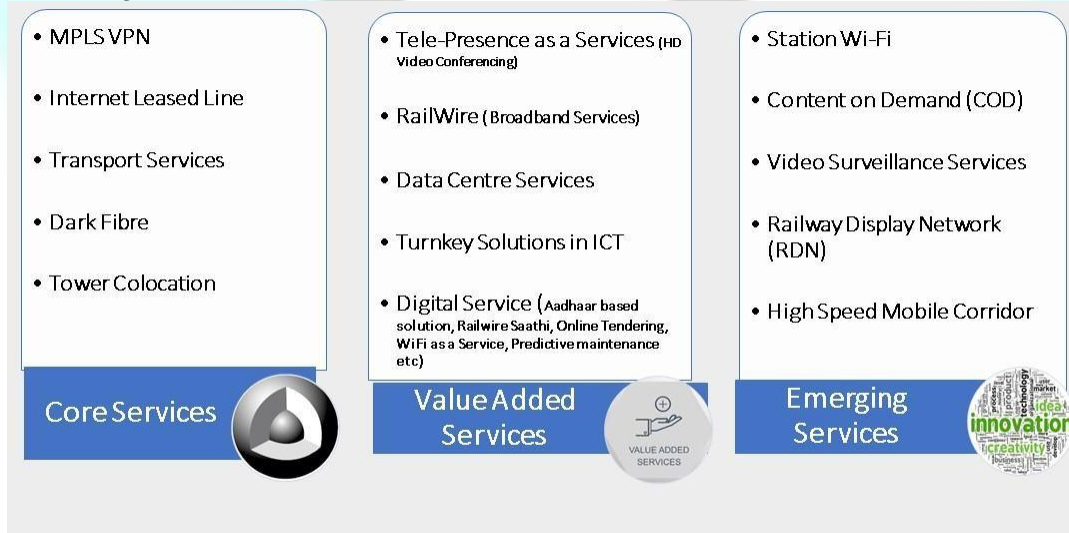
a) **Carrier Services**
- National Long Distance: Carriage of Inter & Intra -circle Voice Traffic across India using stateof the art NGN based network through its Interconnection with all leading Telecom Operators
- Lease Line Services: Available for granularities from E1 to multiple of Gigabit bandwidth&above
- Dark Fiber/Lambda: Leasing to MSOs/Telco's along secured Right of Way of Railway tracks
- Co-location Services: Leasing of Space and 1000+ Towers for collocation of

MSC/BSC/BTSof Telco's

b) Enterprise Services
- Managed Lease Line Services: Available for granularities from E1, DS-3, STM-1 & above
- MPLS VPN: Layer-2 & Layer-3 VPN available for granularities from 2 Mbps& above
- Dedicated Internet Bandwidth: Experience the "Always ON" internet connectivity at yourfingertips in granularities 2 Mbps to several Gbps

c) DATA CENTER
- Infrastructure as a service (IaaS), Hosting as Services, Security operation Centre as a Service (SOCaaS): RailTel has MeitY empaneled two Tier-III data centres in Gurgaon & Secunderabad. Presently RailTel is hosting critical applications of Indian Railways, Central & State government/ PSUs applications. RailTel will facilitate Government's applications
- Hosting services including smooth transition to secured state owned RailTel's Data Centers and Disaster Recovery Centres. RailTel also offers SOC as a Service 'SOCaaS'. In addition, RailTel offers VPN client services so that employees can seamlessly access government's intranet, applications securely from anywhere without compromising security.

d) 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
- Lease Line Services: Available for granularities from E1 to multiple of Gigabit bandwidth & above
- Dark Fiber/Lambda: Leasing to MSOs/Telco's along secured Right of Way of Railway tracks
- Co-location Services: Leasing of Space and 1000+ Towers for collocation of MSC/BSC/BTSof Telco's

e) High-Definition Video Conference:
RailTel has unique service model of providing high -definition video conference bundled with Video Conference equipment, bandwidth and FMS services to provide end to end seamless services on OPEX model connecting HQ with other critical offices. RailTel also offers application-based video conference solution for employees to be productive specially during this pandemic situation.

f) Retail Services – RailWire

RailWire: Triple Play Broadband Services for the Masses. RailTel has unique model of delivering broadband services, wherein local entrepreneurs are engaged in delivering & maintaining broadband services and upto 66% of the total revenues earned are shared to these local entrepreneurs in the state, generating jobs and revitalizing local economies. On date RailTel is serving approx. 4,68,000 subscribers on PAN Indian basis. RailTel can provide broadband service across– Government PSU or any organization's officers colonies and residences.

2. Project Background and Objective of EOI

RailTel intends to participate in Tender floated by end Customer organization MP Police||Intelligence Bhopal - MPP for CCTV Surveillance System for High Court Jabalpur Indore and Gwalior.

RailTel invites EOIs from RailTel's Empanelled Partners for the selection of suitable partner for participating in above mentioned work for the agreed scope work. The empanelled partner is expected to have excellent execution capability and good understanding customer local environment.

3. Scope of Work

The scope of work will be as mentioned in the tender floated by MP Police||Intelligence for CCTV Surveillance System for High Court Jabalpur Indore and Gwalior Tender floated with Reference No. SB/STORE/2024-25 (535) BHOPAL DATED 13.11.2024

The above scope of work is indicative, and the detailed scope of work is given in the end customer tender along with latest amendments and clarifications.

In case of any discrepancy or ambiguity in any clause / specification pertaining to scope of work area, the RFP released by end customer organization shall supersede and will be considered sacrosanct. (All associated clarifications, response to queries, revisions, addendum and corrigendum, associated prime service agreement (PSA)/MSA/SLA also included.)

Special Note: RailTel may retain some portion of the work mentioned in the end organization RFP, where RailTel has competence so that overall proposal becomes most winnable proposal.

4. Response to EOI guidelines

1. **Language of Proposals**
    The proposal and all correspondence and documents shall be written in English in soft copy through an email (file should not exceed 20 Mbps).

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 Business Associate or without any obligation to inform the affected bidder or bidders about the grounds for RailTel's action.

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 by the bidder including the closing page in token of his having studies the EOI document and should be submitted along with the bid.

4. **Period of Validity of bids and Bid Currency**

Bids shall remain valid for a period of 180 days from the date Bid submission date issued by the end Customer organization for which bid is going to submit.

5. **Bid Earnest Money (EMD)**

- The Business Associate shall furnish a sum as given in EOI Notice via online transfer from any scheduled bank in India in favour of "RailTel Corporation of India Limited" along with the offer. This will be called as EOI EMD.
- Offers not accompanied with valid EOI Earnest Money Deposit shall be summarily rejected.
- In case if offer is selected for bidding, the partner has to furnish Earnest Money Deposit (for balance amount as mentioned in the customer's Bid and EoI notice as applicable) for the bid to RailTel. The selected Business Associate shall have to submit EMD to RailTel before submission of bid to end customer as applicable.
- Return of EMD for unsuccessful Business Associates: EOI EMD of the unsuccessful Business Associate shall be returned without interest after completion of EOI process.
- **Return of EMD for successful Business Associate:** EOI-EMD & Earnest Money Deposit (balance EMD) if applicable and Integrity Pact of the successful bidder will be discharged / returned as promptly as possible after the receipt of RailTel's EMD/BG from the Customer and or on receipt of Security Deposit Performance Bank Guarantee as applicable (clause no. 4.6) from Business Associate whichever is later.
  - **Forfeiture of EOI EMD or EOI EMD & EMD (balance proportionate EMD) and or Penal action asper EMD Declaration:**
    - The EOI EMD may be forfeited and or penal action shall be initiated if a BusinessAssociate withdraws his offer or modifies the terms and conditions of the offer during validity period.
    - In case of non-submission of SD/PBG (as per clause no. 4.6) lead to forfeiture of EOI EMD, EMD (balance proportionate EMD) if applicable and Integrity Pact and or suitable action as prescribed in the EMD Declaration shall be initiated as applicable.
- Having participated with another party/consortium apart from RailTel in RailTel's end customer Tender

6. **Security Deposit / Performance Bank Guarantee (PBG)**

- In case the bid is successful, the PBG of requisite amount proportionate to the agreed scope of the work will have to be submitted to RailTel.
- As per work share arrangements agreed between RailTel and Business Associate the PBG will be proportionately decided and submitted by the selected Business Associate.

7. **Last date & time for Submission of EOI response**
EOI response must be submitted to RailTel at the email address specified in the preamble not later than the specified date and time mentioned in the preamble.

8. **Modification and/or Withdrawal of EOI response**
EOI response once submitted will treated, as final and no modification will be permitted except with the consent of the RailTel.
No Business Associate shall be allowed to withdraw the response after the last date and time for submission.

The successful Business Associate will not be allowed to withdraw or back out from the response commitments. In case of withdrawal or back out by the successful business associate,

the Earnest Money Deposit shall be forfeited, and all interests/claims of such Business Associate shall be deemed as foreclosed.

9. **Details of Financial bid for the above referred tender**

Business Associate meeting eligibility criteria and clearing the technical evaluation will be selected for exclusive pre-bid arrangement for optimizing technical and commercial solution so that most winnable solution is submitted to end customer.
In case if there are Two or more Business Associate meeting eligibility criteria and clearing technical evaluation criteria, then price bid will be sought from these Sole partner/ consortiums in the second stage for the given scope of the work and Sole partner/ consortium with overall lowest (L1) offer will be selected for exclusive pre bid arrangement for optimizing technical and commercial solution.
The final bid for the tender will be prepared jointly with the selected Business Associate so that the optimal bid can be put with a good chance of winning the Tender.

10. **Clarification of EOI Response**
To assist in the examination, evaluation and comparison of bids the purchaser may, at its discretion,ask the Business Associate for clarification. The response should be in writing and no change in theprice or substance of the EOI response shall be sought, offered or permitted.

11. **Period of Association/Validity of Agreement**
RailTel will enter into a pre-bid agreement with selected bidder with detailed Terms and conditions.

5. *Prequalification Criteria and Instructions to Bidders (ITB)*

Prequalification criteria

The qualification criteria laid within this document shall be met by the bidder, as a Single Firm. A bidder who submits more than one EoI shall be summarily disqualified. The 'Bidder', shall be primarily accountable for the supply, implementation, testing and maintenance of the entire scope of the project.

S No.	Particulars	Criteria for Tender Package (Mandatory Compliance & Document Submission)
A)	**Financial Conditions**	
i)	BA should be registered under Companies Act, 1956 or Companies Act 2013 or as amended and Partnership act 1932 should have at least 3 years of operations in India as on bid submission date.	1. Certificate of Incorporation 2. GST Registration 3. PAN Card 4. Documentary evidence in the form of Order/Agreement/ MOU etc
ii)	BA individually should have average turnover of at least INR- 5 Cr for last three years.	Turnover Certificate issued by the Chartered Accountant. Certificate should contain UDIN no. issued by ICAI and extracts from the audited balance sheet and profit & loss for last three financial year.
iii)	BA should also have a positive net worth & be profitable in each of the last 3 financial years.	Positive Net Worth Certificate issued by the CA.
iv)	The participating bidder should be a currently active empaneled partner of RailTel.	Documentary proof of empanelment along with proof of empanelment Fee to be submitted.
B)	**Technical Conditions**	
v)	Bidder should have project experience of CCTV surveillance each of value not less than 10 Cr in last 5years.	Work Orders/LOI/Purchase Order etc.
vi)	The supplier should be Class 1 or Class 2 Local supplier.	Documentary proof to be submitted.

S No.	Particulars	Criteria for Tender Package (Mandatory Compliance & Document Submission)
C)	**Annexures**	
vii)	**Annexure 1**	**Covering Letter:** Self-certification duly signed by authorized signatory on company letter head.
viii)	**Annexure 2**	The Bidder should agree to abide by all the technical, commercial & financial conditions of the end customer RFP for which EOI is submitted.
		Self-certification duly signed by authorized signatory on company letter head.
ix)	**Annexure 3**	An undertaking signed by the Authorized Signatory of the company to be provided on letter head. The Bidder should not have been blacklisted/debarred by any Governmental /Non-Governmental Organization in India as on bid submission date.
x)	**Annexure-4**	Format for Affidavit to be uploaded by BA along with the tender documents.
xi)	**Annexure-5**	Non-disclosure agreement with RailTel.
xii)	**Annexure-6**	BOQ of the RFP document. Price Bid Format to be submitted in separate password protected pdf.
xiii)	**Power of Attorney**	Power of Attorney and Board Resolution in favor of one of its employees who will sign the Bid Documents.
xiv)	**Additional Documents to be Submitted**	1) Technical Proposal with overview of the project with strength of the Partner, please submit the technical annexure mentioned in the end customer RFP (if any). 2) Manufacturer Authorization Form for all major equipment 3) Spec. Compliance sheet.

1. Bidder's Profile

The bidder shall provide the information in the below table:

S. No.	ITEM	Details
1.	Full name of bidder's firm	
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 as a whole, 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	

5. Payment Terms, Timelines & SLA
1. Evaluation Criteria

1.1 The Business Associates are first evaluated on the basis of the Pre-Qualification Criteria asper clause 5 above.

1.2 The Business Associate who meets all the Pre-qualification criteria, their price bid will be evaluated. The Lowest (L1) price bidder will be selected and entered into agreement with for delivery of the work on back-to-back basis for the agreed scope of work if RailTel is awarded contract from end customer.

1.3 RailTel reserves the right to further negotiate the prices with eligible L1 bidder during further reverse auction process of end customer. Selected bidder must ensure the best commercial offer to RailTel to offer the most winnable cost to customer.

1.4 RailTel also 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. 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. RailTel may at its discretion assign lead factor to the Business associate as per RailTel policy for shortlisting partner against this EOI. RailTel also reserves the right to negotiate the price with the selected bidder.

1.5 All General requirement mentioned in the Technical Specifications are required to be complied. The solution proposed should be robust and scalable

2. Withdrawal of Bids

A Bidder wishing to withdraw its bid shall notify to RailTel by e-mail prior to the deadline prescribed for bid submission. The notice of withdrawal shall be addressed to RailTel at the address named in the Bid Data Sheet, and bear the Contract name, the <Title> and < Bid No.>, and the words "Bid Withdrawal Notice." Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a valid submitted bid.

No bid can be withdrawn in the interval between the bid submission deadline and the expiration of the bid validity period specified in the Bid Data Sheet. Withdrawal of a bid during this interval may result in the forfeiture of the Bidder's EMD.

3. Evaluation Process

The evaluation process of the bid proposed to be adopted by RailTel is indicated in this section. The purpose of this section is to provide the Bidder an idea of the evaluation process that RailTel may adopt.

RailTel shall appoint a Bid Management Committee (BMC) to scrutinize and evaluate the technical and commercial bids received. The BMC will examine the Bids to determine whether they are complete, responsive and whether the bid format conforms to the bid requirements. RailTel may waive any informality or non-conformity in a bid which does not constitute a material deviation according to RailTel.

The bid prices should not be mention in any part of the bid other than the Commercial Bid. Any attempt by a bidder to influence the bid evaluation process may result in the rejection of Bid and forfeiture of EMD.

4. Performance Bank Guarantee

The Bidder shall at his own expense, deposit with RailTel, an unconditional and irrevocable Performance Bank Guarantee (PBG) from nationalized banks as per the format given in this bid, payable on demand, for the due performance and fulfilment of the contract by the Bidder.

This Performance Bank Guarantee will be submitted within 30 days of the notification of award of the contract/ Letter of Acceptance (LOA) issuance whichever is earlier. If PBG is not submitted within this time frame a delayed PBG penalty will be attracted. Post 30 days and upto 60 days from date of notification of award of the contract/ Letter of Acceptance (LOA) issuance a penalty at 15% per annum interest of LOA amount will be levied as delayed PBG penalty and this penalty will be deducted from the Invoices & EMD of the Bidder. After these 60 days if PBG is not submitted then it will be assumed that the Bidder is not interested in submitting PBG and the Amount of PBG along with the delayed PBG penalty calculated will be retained from Invoices & EMD of the Bidder. Non submission of PBG can also lead to cancellation of contract and the decision with respect to whether, to retain the PBG Amount and penalty from Invoices & EMD or cancellation of contract, will be at the sole discretion of RailTel. In the event of cancellation of contract EMD will be forfeited. If PBG is retained from Invoices & EMD then the PBG Amount only and not the penalty attracted will be paid to the Bidder in such a case post the contract period plus three months(expected PBG validity date) are over after deducting any applicable deductions (eg: Poor service, etc).

This Performance Bank Guarantee will be for an amount equivalent to 3% of the total contract value. All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the Bidder. The Performance Bank Guarantee format can be found in this document

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

In the event of the Bidder being unable to service the contract for whatever reason, RailTel would invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of RailTel under the Contract in the matter, the proceeds of the PBG shall be payable to RailTel as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. RailTel shall notify the Bidder in writing of the exercise of its right to receive such compensation within 30 days, indicating the contractual obligation(s) for which the Bidder is in default.

The 30 days' notice period shall be considered as the 'Cure Period' to facilitate the Implementation Agency to cure the breach. The PBG shall be invoked only if the breach is solely attributable to the bidder and the bidder fails to rectify the breach within the 'Cure Period'.

RailTel shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to the Bidder, the equivalent value of any payment made to the Bidder due to inadvertence, error, collusion, misconstruction or misstatement.

5. Rights to Terminate the Process

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

This bid document does not constitute an offer by RailTel. The Bidder's participation in this process may result in RailTel selecting the Bidder to engage in further discussions and negotiations towards execution of a contract. The commencement of such negotiations does not, however, signify a commitment by RailTel to execute a contract or to continue negotiations. RailTel may terminate negotiations at any time without assigning any reason.

6Payment terms

- RailTel shall make payment to selected Business Associate after receiving payment from Customer for the agreed scope of work. In case of any penalty or deduction made by customer for the portion of work to be done by BA, same shall be passed on to Business Associate.
- All payments by RailTel to the Partner will be made after the receipt of payment by RailTel from end customer organization and upon submission of correct Tax Invoices as per statutory norms.
- The Payments received from end customer will be disbursed scope wise to the selected BA. The BA selected for a particular scope will receive payments once end customer

releases payments for the specific part

SLA

The selected bidder will be required to adhere to the SLA matrix if/as defined by the end Customer. SLA breach penalty will be applicable proportionately on the selected bidder, as specified by the end Customer. The SLA scoring and penalty deduction mechanism for in-scope of work area shall be followed as specified by the customer. All associated clarifications, responses to queries, revisions, addendum and corrigendum, associated Prime Services Agreement (PSA)/ MSA/ SLA also included. 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.

Other Terms and Conditions

Any other terms and conditions in relation to SLA, Payments, PBG etc. will be as per the RFP of the end customer.

Note: Depending on RailTel's business strategy RailTel may choose to work with Partner who is most likely to support in submitting a winning bid.

COVERING LETTER (To be on company letter head)

EoI Reference No:

Date :

To,

RailTel Corporation of India Ltd.
Western Railway Microwave
complex, Senapati Bapat Marg,
Mahalaxmi, Mumbai 400013

Dear Sir,

SUB: Participation in the EoI process

Having examined the Invitation for EoI document bearing the reference number

_____ released by your esteemed organization, we, undersigned, hereby acknowledge the receipt of the same and offer to participate in conformity with the said Invitation for EoI document.

If our application is accepted, we undertake to abide by all the terms and conditions mentioned in the said Invitation for EoI document.

We hereby declare that all the information and supporting documents furnished as a part of our response to the said Invitation for EoI document, are true to the best of our knowledge. We understand that in case any discrepancy is found in the information submitted by us, our EoI is liable to be rejected.

We hereby Submit EMD amount of Rs._____issued vide_____from Bank_____.

Authorized Signatory
Name
Designation

Annexure 2: Format for Self-Certificate & Undertaking

Self-Certificate (To be on company letter head)

EoI Reference No: Date:

To,

RailTel Corporation of India Ltd.
Western Railway Microwave
complex, Senapati Bapat Marg,
Mahalaxmi, Mumbai 400013

Dear Sir,

Sub: Self Certificate for Tender, Technical & other compliances

1) Having examined the Technical specifications mentioned in this EOI & end customer tender, we hereby confirm that we meet all specification.

2) We_____agree to abide by all the technical, commercial & financial conditions of the end customer RFP for which EOI is submitted (except pricing, termination & risk purchase rights of the RailTel). We understand and agree that RailTel shall release the payment to selected BA after the receipt of corresponding payment from end customer by RailTel. Further we understand that in case selected BA fails to execute assigned portionof work, then the same shall be executed by RailTel through third party or departmentally at the riskand cost of selected BA.

3) We agree to abide by all the technical, commercial & financial conditions of the end customer's RFP for the agreed scope of work for which this EOI is submitted.

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 end customer's RFP. We are hereby enclosing the arrangement of OEMs against each of the BOQ item quoted as mentioned end customer's RFP. We also undertake to submit MAF and other documents required in the end Customer organization tender in favour of RailTel against the proposed products.

5) We hereby undertake to work with RailTel as per end customer's RFP terms and conditions. We confirm to submit all the supporting documents constituting/ in compliance with the Criteria as required in the end customer's RFP terms and conditions like technical certificates, OEM compliance documents.

6) We understand and agree that RailTel is intending to select a BA who is willing to accept all terms & conditions of end customer organization's RFP for the agreed scope of work. RailTel will strategies to retain scope of work where RailTel has competence.

7) We hereby agree to submit that in case of being selected by RailTel as BA for the proposed project (for which EOI is submitted), we will submit all the forms, appendix, relevant documents etc. to RailTel that is required and desired by end Customer well before the bid submission date by end customer and as and when required.

8) We hereby undertake to sign Pre Bid Agreement and Non-Disclosure Agreement with RailTel on a non-judicial stamp paper of Rs. 100/- in the prescribed Format.

Authorized Signatory

Name & Designation

Annexure 3: Undertaking for not Being Blacklisted/Debarred

<On Company Letter Head>

To,

RailTel Corporation of
India Ltd. Western Railway
Microwave complex,
Senapati Bapat Marg,
Mahalaxmi, Mumbai
400013

Subject: Undertaking for not Being

Blacklisted/Debarred

We, Company Name   , having its registered office at
                    Address

hereby declares that that the Company has not been blacklisted/debarred by any

Governmental/ Non-Governmental organization in India for past 3 Years as on bid submission
date.

Date and Place

Authorized Signatory's Signature:

Authorized Signatory's Name and Designation:
Bidder's Company Seal:

Annexure 4: Format of Affidavit

FORMAT FOR AFFIDAVIT TO BE UPLOADED BY BA ALONGWITH THE EOI DOCUMENTS
(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/-.
The paper has to be in the name of the BA) **

     I……………………… (Name and designation)** appointed as the attorney/authorized signatory of the BA (including its constituents),
M/s_____(hereinafter called the BA) for the purpose of the EOI documents for the work of _____as per the EOI No. _____of (RailTel Corporation of India Ltd.), do hereby solemnly affirm and state on the behalf of the BA including its constituents as under:

1. I/we the BA (s), am/are signing this document after carefully reading the contents.

2. I/we the BA(s) also accept all the conditions of the EOI and have signed all the pages in confirmation thereof.

3. I/we hereby declare that I/we have downloaded the EOI documents from RailTel website www.railtelindia.com. I/we have verified the content of the document from the website and there is no addition, no deletion or no alternation to be content of the EOI document. In case of any discrepancy noticed at any stage i.e. evaluation of EOI, execution of work or final payment of the contract, the master copy available with the RailTel Administration shall be final and binding upon me/us.

4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.

5. I/we also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.

6. I/we declare that the information and documents submitted along with the EOI by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.

7. I/we undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of EOI, it shall lead to forfeiture of the EOI EMD besides banning of business for five years on entire RailTel. Further, I/we (insert name of the BA)**_____and all my/our constituents understand that my/our constituents understand that my/our offer shall be summarily rejected.

8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for five years on entire RailTel.

9. The bidder must submit Manufacturer Authorization Form (MAF)/Product Genuine Certificate (PGC) along with tender documents for all major equipment(s) (like CCTV Cameras, GRP poles, Network Switches, Recording server, Management Server, etc from respective approved OEM (Please Note:- The Tender reference no., Authorized person Name, Mobile Number and e-mail ID & Designation, should be mentioned in the MAF, else it will not be considered as the Valid MAF) .

<div align="right">

DEPONENT
SEAL AND SIGNATURE
OF THE BA

</div>

VERIFICATION

I/We above named EOI do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

<div align="right">

DEPONENT

SEAL AND SIGNAURE
OF THE BA

</div>

Place:
Dated:

**The contents in Italics are only for guidance purpose. Details as appropriate, are to be filled in suitably by BA. Attestation before Magistrate/Notary Public.

NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement (this "***Agreement***") is made and entered into on this _____ day of _____ , 2021 (the "***Effective Date***") at_____ .

By and between

RailTel Corporation of India Limited, **(CIN: L64202DL2000GOI107905),** a Public Sector Undertaking under Ministry of Railways, Govt. of India, having its registered and corporate office at Plate-A, 6th Floor, Office Block, Tower -2, East Kidwai Nagar, New Delhi-110023, (hereinafter referred to as **'RailTel')**, which expression shall unless repugnant to the context or meaning thereof, deem to mean and include its successors and its permitted assignees of the ONE PART,

And

_____) (CIN: _____), a company duly incorporated under the provisions of Companies Act, _____ having its registered office at _____ , (hereinafter referred to as **'_____ '),** which expression shall unless repugnant to the context or meaning thereof, deem to mean and include its successors and its permitted assignees of OTHER PART

RailTel and _____ shall be individually referred to as "Party" and jointly as "Parties"

WHEREAS, RailTel and _____ , each possesses confidential and proprietary information related to its business activities, including, but not limited to, that information designated as confidential or proprietary under Section 2 of this Agreement, as well as technical and non-technical information, patents, copyrights, trade secrets, know-how, financial data, design details and specifications, engineering, business and marketing strategies and plans, forecasts or plans, pricing strategies, formulas, procurement requirements, vendor and customer lists, inventions, techniques, sketches, drawings, models, processes, apparatus, equipment, algorithms, software programs, software source documents, product designs and the like, and third party confidential information (collectively, the "***Information***");

WHEREAS, the Parties have initiated discussions regarding a possible business relationship for _____ .

WHEREAS, each Party accordingly desires to disclose certain Information (each Party, in such disclosing capacity, the "***Disclosing Party***") to the other Party (each Party, in such receiving capacity, the "***Receiving Party***") subject to the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the receipt of certain Information, and the mutual promises made in this Agreement, the Parties, intending to be legally bound, hereby agree as follows:

Permitted Use.

Receiving Party shall:

hold all Information received from Disclosing Party in confidence;

use such Information for the purpose of evaluating the possibility of entering into a commercial arrangement between the Parties concerning such Information; and

restrict disclosure of such Information to those of Receiving Party's officers, directors, employees, affiliates, advisors, agents and consultants (collectively, the "***Representatives***") who the Receiving Party, in its reasonable discretion, deems need to know such Information, and are bound by the terms and conditions of (1) this Agreement, or (2) an agreement with terms and conditions substantially similar to those set forth in this Agreement.

The restrictions on Receiving Party's use and disclosure of Information as set forth above shall not apply to any Information that Receiving Party can demonstrate:

is wholly and independently developed by Receiving Party without the use of Information of Disclosing Party;

at the time of disclosure to Receiving Party, was either (A) in the public domain, or (B) known to Receiving Party;

is approved for release by written authorization of Disclosing Party; or

is disclosed in response to a valid order of a court or other governmental body in the India or any political subdivision thereof, but only to the extent of, and for the purposes set forth in, such order; provided, however, that Receiving Party shall first and immediately notify Disclosing Party in writing of the order and

permit Disclosing Party to seek an appropriate protective order.

(c) 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.

Designation.

Information shall be deemed confidential and proprietary and subject to the restrictions of this Agreement if, when provided in:

written or other tangible form, such Information is clearly marked as proprietary or confidential when disclosed to Receiving Party; or

oral or other intangible form, such Information is identified as confidential or proprietary at the time of disclosure.

Cooperation. Receiving Party will immediately give notice to Disclosing Party of any unauthorized use or disclosure of the Information of Disclosing Party.

Ownership of Information. All Information remains the property of Disclosing Party and no license or other rights to such Information is granted or implied hereby. Notwithstanding the foregoing, Disclosing Party understands that Receiving Party may currently or in the future be developing information internally, or receiving information from other parties that may be similar to Information of the Disclosing Party. Notwithstanding anything to the contrary, nothing in this Agreement will be construed as a representation or inference that Receiving Party will not develop products, or have products developed for it, that, without violation of this Agreement, compete with the products or systems contemplated by Disclosing Party's Information.

No Obligation. Neither this Agreement nor the disclosure or receipt of Information hereunder shall be construed as creating any obligation of a Party to furnish Information to the other Party or to enter into any agreement, venture or relationship with the other Party.

Return or Destruction of Information.

All Information shall remain the sole property of Disclosing Party and all materials containing any such Information (including all copies made by Receiving Party) and its Representatives shall be returned or destroyed by Receiving Party immediately upon the earlier of:

termination of this Agreement;

expiration of this Agreement; or

Receiving Party's determination that it no longer has a need for such Information.

Upon request of Disclosing Party, Receiving Party shall certify in writing that all Information received by Receiving Party (including all copies thereof) and all materials containing such Information (including all copies thereof) have been destroyed.

Injunctive Relief: Without prejudice to any other rights or remedies that a party may have, each party acknowledges and agrees that damages alone may not be an adequate remedy for any breach of this Agreement, and that a party shall be entitled to seek the remedies of injunction, specific performance and/or any other equitable relief for any threatened or actual breach of this Agreement

Notice.

Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows, with notice deemed given as indicated:

by personal delivery, when delivered personally;

by overnight courier, upon written verification of receipt; or

by certified or registered mail with return receipt requested, upon verification of receipt.

Notice shall be sent to the following addresses or such other address as either Party specifies in writing.

RailTel Corporation of India limited:

Attn: _____

Address:_____

Phone:

Email.

_____:

Attn:

Address:

Phone:

Email:

Term, Termination and Survivability.

Unless terminated earlier in accordance with the provisions of this agreement, this Agreement shall be in full force and effect for a period of _____years from the effective date hereof.

Each party reserves the right in its sole and absolute discretion to terminate this Agreement by giving the other party not less than 30 days' written notice of such termination.

Notwithstanding the foregoing clause 9(a) and 9 (b) , Receiving Party agrees that its obligations, shall:

In respect to Information provided to it during the Term of this agreement, shall survive and continue even after the expiry of the term or termination of this agreement; and

not apply to any materials or information disclosed to it thereafter.

Governing Law and Jurisdiction. This Agreement shall be governed in all respects solely and exclusively by the laws of India without regard to its conflicts of law principles. The Parties hereto expressly consent and submit themselves to the jurisdiction of the courts of New Delhi.

Counterparts. This agreement is executed in duplicate, each of which shall be deemed to be the original and both when taken together shall be deemed to form a single agreement

No Definitive Transaction. The Parties hereto understand and agree that no contract or agreement with respect to any aspect of a potential transaction between the Parties shall be deemed to exist unless and until a definitive written agreement providing for such aspect of the transaction has been executed by a duly authorized representative of each Party and duly delivered to the other Party (a "***Final Agreement***"), and the Parties hereby waive, in advance, any claims in connection with a possible transaction unless and until the Parties have entered into a Final Agreement.

Settlement of Disputes:

The parties shall, at the first instance, attempt to resolve through good faith negotiation and consultation, any difference, conflict or question arising between the parties hereto relating to or concerning or arising out of or in connection with this agreement, and such negotiation or consultation shall begin promptly after a Party has delivered to another Party a written request for such consultation.

In the event of any dispute, difference, conflict or question arising between the parties hereto, relating to or concerning or arising out of or in connection with this agreement, is not settled through good faith negotiation or consultation, the same shall be referred to arbitration by a sole arbitrator.

The sole arbitrator shall be appointed by CMD/RailTel out of the panel of independent arbitrators maintained by RailTel, having expertise in their respective domains. The seat and the venue of arbitration shall be New Delhi. The arbitration proceedings shall be in accordance with the provision of the Arbitration and Conciliation Act 1996 and any other statutory amendments or modifications thereof. The decision of arbitrator shall be final and binding on both parties. The arbitration proceedings shall be conducted in English Language. The fees and cost of arbitration shall be borne equally between the parties.

CONFIDENTIALITY OF NEGOTIATIONS

Without the Disclosing Party's prior written consent, the Receiving Party shall not disclose to any Person who is not a Representative of the Receiving Party the fact that Confidential Information has been made available to the Receiving Party or that it has inspected any portion of the Confidential Information or that discussions between the Parties may be taking place.

REPRESENTATION

The Receiving Party acknowledges that the Disclosing Party makes no representation or warranty as to the accuracy or completeness of any of the Confidential Information furnished by or on its behalf. Nothing in this clause operates to limit or exclude any liability for fraudulent misrepresentation.

ASSIGNMENT

Neither this Agreement nor any of the rights, interests or obligations under this Agreement shall be assigned, in whole or in part, by operation of law or otherwise by any of the Parties without the prior written consent of each of the other Parties. Any purported assignment without such consent shall be void. Subject to the preceding sentences, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and assigns.

EMPLOYEES AND OTHERS

Each Party shall advise its Representatives, contractors, subcontractors and licensees, and shall require

its Affiliates to advise their Representatives, contractors, subcontractors and licensees, of the obligations of confidentiality and non-use under this Agreement, and shall be responsible for ensuring compliance by its and its Affiliates' Representatives, contractors, subcontractors and licensees with such obligations. In addition, each Party shall require all persons and entities who are not employees of a Party and who are provided access to the Confidential Information, to execute confidentiality or non-disclosure agreements containing provisions no less stringent than those set forth in this Agreement. Each Party shall promptly notify the other Party in writing upon learning of any unauthorized disclosure or use of the Confidential Information by such persons or entities.

NO LICENSE
Nothing in this Agreement is intended to grant any rights to under any patent, copyright, or other intellectual property right of the Disclosing Party, nor will this Agreement grant
the Receiving Party any rights in or to the Confidential Information of the Disclosing Party, except as expressly set forth in this Agreement.

RELATIONSHIP BETWEEN PARTIES:

Nothing in this Agreement or in any matter or any arrangement contemplated by it is intended to constitute a partnership, association, joint venture, fiduciary relationship or other cooperative entity between the parties for any purpose whatsoever. Neither party has any power or authority to bind the other party or impose any obligations on it and neither party shall purport to do so or hold itself out as capable of doing so.

20: **UNPULISHED PRICE SENSITIVE INFORMATION (UPSI)**

_____agrees and acknowledges that _____, its Partners, employees, representatives etc., by virtue of being associated with RailTel and being in frequent communication with RailTel and its employees, shall be deemed to be "Connected Persons" within the meaning of SEBI (Prohibition of Insider Trading) Regulations, 2015 and shall be bound by the said regulations while dealing with any confidential and/ or price sensitive information of RailTel. _____shall always and at all times comply with t he obligations and restrictions contained in the said regulations. In terms of the said regulations, _____ shall abide by the restriction on communication, providing or allowing access to any Unpublished Price Sensitive Information (UPSI) relating to RailTel as well as restriction on trading of its stock while holding such Unpublished Price Sensitive Information relating to RailTel

MISCELLANEOUS. This Agreement constitutes the entire understanding among the Parties as to the Information and supersedes all prior discussions between them relating thereto. No amendment or modification of this Agreement shall be valid or binding on the Parties unless made in writing and signed on behalf of each Party by its authorized representative. The failure or delay of any Party to enforce at any time any provision of this Agreement shall not constitute a waiver of such Party's right thereafter to enforce each and every provision of this Agreement. In the event that any of the terms, conditions or provisions of this Agreement are held to be illegal, unenforceable or invalid by any court of competent jurisdiction, the remaining terms, conditions or provisions hereof shall remain in full force and effect. The rights, remedies and obligations set forth herein are in addition to, and not in substitution of, any rights, remedies or obligations which may be granted or imposed under law or in equity.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date set forth above.

_____ :   **RailTel Corporation of India Limited:**

By_____

Name:

Title:

By_____

Name:

Title:

Witnesses

Annexure-6 Price bid as per the format of the IIT Bombay Tender.

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Annexure-7 Tender floated by IIT, Bombay.
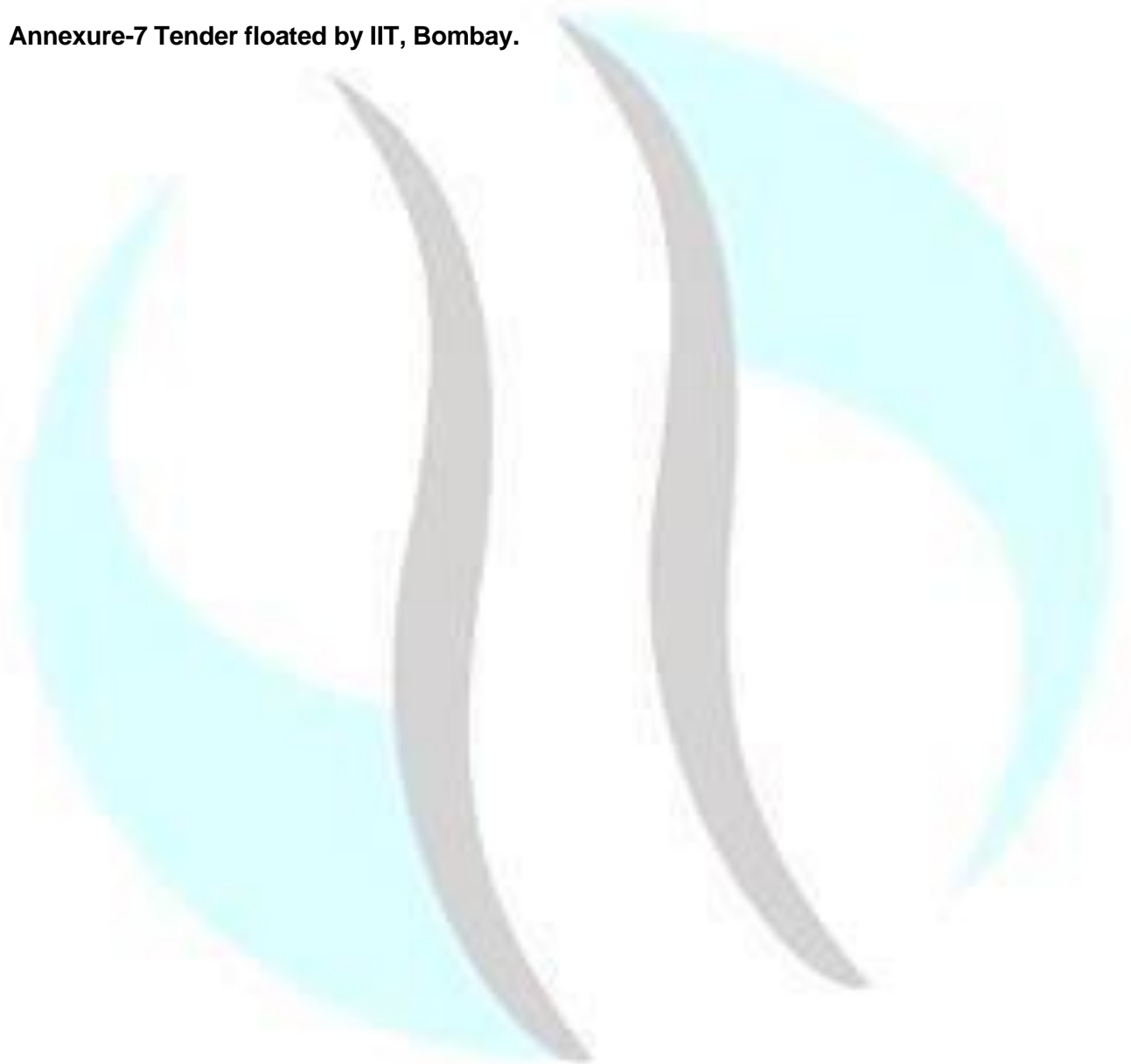
SPECIAL BRANCH
POLICE HEADQUARTER, M.P., BHOPAL

NO. SB / Store/2024-25 (535), Bhopal, Dated 13-11-2024

"ONLINE E-TENDER NOTICE "
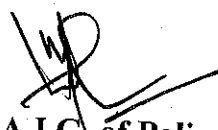
E-tender are invited by Assistant Inspector General of Police, Special Branch (G) M.P., Bhopal on behalf of DGP MP Bhopal for the following item on website https://mptenders.gov.in/nicgep/app:-

S.No.	Name of Item(s)	Qty.	Tender Fees (Rs.)	EMD (Rs.)	Tender No.
			Paid Online Through mptenders.gov.in		
1	CCTV Surveillance System for High Court Jabalpur, Indore & Gwalior	03	20,000/-	45,00,000/-	1st Tender

1. Cost of tender document (Tender Fee) is non refundable and cannot be exempted in any condition & **must submit online through website** https://mptenders.gov.in/nicgep/app.
2. Tender document can be download from the website of MP Police (www.mppolice.gov.in)
3. Bids shall be submitted online only at MP Tenders website: https://mptenders.gov.in/nicgep/app

4. Tender Schedule :

No.	Tender Activity	Date & Time
i	Submission of written queries - through e-mail: sec25-sb@mppolice.gov.in	**21/11/2024 up to 1700 hrs.**
ii	Pre Bid Meeting along with written queries	22/11/2024 at 1100 hrs.
iii	Bid Submission Start Date	02/12/2024 at 1000 hrs.
iv	Last date of online e-Tender submission	12/12/2024 up to 1600 hrs.
v	Bid will be opened on	13/12/2024 up to 1600 hrs.
vi	Demonstration from	18-20/12/2024 at 11.00 hrs.

A.I.G. of Police
Special Branch (G) M.P. Bhopal
Tel. No. 0755- 2443654

NO.   SB / Store/2024-25 (   ), Bhopal,   Dated   -11-2024
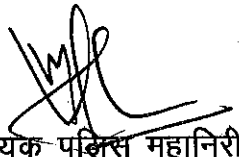
"ऑनलाईन ई–निविदा सूचना"

पुलिस महानिदेशक, मध्यप्रदेश की ओर से सहायक पुलिस महानिरीक्षक, विशेष शाखा (जी) पुलिस मुख्यालय, भोपाल द्वारा वेबसाईट https://mptenders.gov.in/nicgep/app पर निम्नलिखित उपकरणों के कय हेतु ऑनलाइन निविदा आमंत्रित की जाती है:–

S.No.	Name of Item(s)	Qty.	Tender Fees (Rs.)	EMD (Rs.)	Tender No.
			Paid Online Through mptenders.gov.in		
1	CCTV Surveillance System for High Court Jabalpur, Indore & Gwalior	03	20,000/-	45,00,000/-	1st Tender

1. निविदा प्रपत्र ऑनलाइन वेबसाइट https://mptenders.gov.in/nicgep/app पर जमा किये जाएंगे।

2. निविदा शुल्क ऑनलाइन जमा करना अनिवार्य है।

3. मध्यप्रदेश पुलिस की वेबसाइट www.mppolice.gov.in से निविदा प्रपत्र एवं विस्तृत जानकारी डाउनलोड की जा सकती है।

4. निविदा समय सारणी:

No.	Tender Activity	Tentative Date & Time
i	Submission of written queries - through e-mail: **sec25-sb@mppolice.gov.in**	**21/11/2024 up to 1700 hrs.**
ii	Pre Bid Meeting along with written queries	22/11/2024 at 1100 hrs.
iii	Bid Submission Start Date	02/12/2024 at 1000 hrs.
iv	Last date of online e-Tender submission	12/12/2024 up to 1600 hrs.
v	Bid will be opened on	13/12/2024 up to 1600 hrs.
vi	Demonstration from	18-20/12/2024 at 11.00 hrs.

सहायक पुलिस महानिरीक्षक,
विशेष शाखा (सा) म.प्र.भोपाल
दूरभाष कं.–0755–2443654

Check List
(To be submitted with First Page in Technical Bid Compulsory)

Name of Firm :

Name of Item :

S. No.	Description	Details	Page No.
1	Tin No.		
2	Firm's Registration & Certificate Date		
3	EMD Online		
4	Online (Tender Fee)		
5	Acceptance of all terms & Conditions of the Tender		
6	Tender Form		
7	Separate Technical Bid & Commercial Bid		
8	Income Tax clearance certificate with copy of I.T. Returns		
9	PAN Number		
10	GST/Sale Tax Clearance Certificate		
11	Turnover		
	2021- 22	Rs.	
	2022- 23	Rs.	
	2023- 24	Rs.	
12	Authorization /OEM Cert. of the item		
13	Previous Supply order		
14	Spec. Compliance Sheet		

Note: Compliance Statement for each item(Bidder need to attach with technical Bid and one set extra provide on date of demonstration)

Item Name: ----   **Make ---**   **Model No.-----**

S.No.	Tender Specification	Compliance (Yes/No)	Actual proposed specification (mentioning Make & Model of the item)	Page No. Bid page no. & row no.	Remark (Higher/Equivalent/ Lower)

Seal and signature

Proforma for Financial Bid

No.	Name of Items	Quantity	Make/ Model	Unit Rate including all taxes etc.	Total Cost including all taxes etc.
1	2	3	4	5	6

MADHYA PRADESH POLICE HEADQUARTER, BHOPAL

ANNEXURE "B"

Tender Notice NO. SB /Store/2024-25 (   ), Bhopal, Dated   -09-2024

TENDER FORM

(i)   Tender for supply of --

(Mention the name of the articles for which the tender is submitted)

(ii)   Name and full address of the Firm submitting the tender.

(iii)   Address to :- The Asstt. I.G. of Police, Special Branch (G), M.P., Bhopal.

(iv)   Reference :- This is with reference to tender No. ………….. Date …………

(v)   Tender fee amounting to Rs.   /-(Rs. ----------- Only) has been deposited vide e-Challan   No…….   Date ……………..

(vi)   We agree to abide by all conditions mentioned in Tender Notice No. …………
Specific by the A.I.G. of Police, (G) M.P., Bhopal and also the General Terms and conditions as annexed with said Tender Notice and as given in the attached sheets, all the pages of which have been signed in the margin by us in tokens of our acceptance of the terms and conditions, therein.

(vii)   Our rates for the supply/ FOB of …………………………… are as under :-
(Mention the name of the article and its quantity of which tender is submitted rate quoted should be in figures as well as words. Rates of the articles should be shown in financial bid only not in technical bid.)

1.

2.

3.

(viii) We further agree to deliver mentioned stores within a period of ……….. days from the date of the receipt of firm order.

(ix)   We confirm the rates quoted above are valid up to one year from the date of submission of tender.

(x)   Bank Guarantee/ F.D.R. No. …………….. Dated …………..for Rs. ……………(in words Rs……………………….) favor of the A.I.G. Police, S.B. (G), PHQ, Bhopal on -------------- (Mention the name of the bank) is enclosed herewith to cover earnest money shown in the Tender notification published in various news papers and www.mpolice.gov.in and online **website** https://mptenders.gov.in/nicgep/app. Date :
Place:

Signature of the Proprietor/Manager
Representative of the firm on
behalf of the Firm giving tender

POLICE HEAD QUARTER, MADHYA PRADESH, BHOPAL
Tender application form

(To be filled up by the tendrer)

1	Name & Full Address of the firm:	
2	Registered Office with Address (Copy of registration certificate of firm may be enclosed)	
3	Income Tax PAN no.	
4	Tin No.	
5	GST/Sales tax Clearance Certificate of last financial year	
6	Weather proprietorship / limited company or pvt. ltd. or partnership	
7	If Single Proprietor, Name & Address of the Proprietor.	
8	If Partnership Firm, Name & Address of the Partner.	
9	If Private limited or Public company, then name & Address of directors.	
10	Whether you have any shop or establishment in M.P. If so detailed Addresses of the same.	
11	Name & Addresses of the persons who will face represent the firm while dealing with the Police Head Quarters. (For documentation and demonstration)	
12	Turnover for the last three years. (Attach only CA certificate)	2021-22 2022-23 2023-24
13	Supplies to Govt. Department in last financial year.	

SIGNATURE OF THE TENDRER WITH SEAL

SPECIAL BRANCH POLICE HEAD QUARTER M.P. BHOPAL
GENERAL TERMS AND CONDITIONS OF TENDER

1. Tenderer(s) shall submit firm Registration number & certificate, **TIN Number and Current GST Return and GST Number required.** Income Tax Clearance Certificate, IT return & PAN Number, along with the tender, without which the tender may not be considered.

2. Each tender bid shall comprise of
   Technical bid
   Commercial bid

3. **Tender fee**

   Tender form shall be obtained from the office of the Director General of Police, Madhya Pradesh and used for each item by depositing a tender fee paid by Challan under Head 0055-Police-00-Police-105-Receipts of state head-quarters police-0000-None in any State Bank of India in M. P. Tender form can also be obtained by downloading from the www.mppolice.gov.in website.

4. The rate/unit must not be altered under any circumstances and the rates must be entered in words as well as in figures.

5. The tender shall remain valid for the acceptance only in the one year for which it has been invited. Conditional tender shall not be entertained. For item rate tenders the rate validity shall be for 3 months.

6. All rates quoted in the tender must be based on free delivery in good condition, securely packed and F.O.R. destination being Stores, Special Branch, M.P. Bhopal or various units in the state. The rates should be inclusive of all taxes (taxes & duties should be shown separately). In case of local suppliers, no cartage shall be paid by the Government and the delivery of goods shall have to be given at the premises of the Stores, Special Branch, M.P. Bhopal /DistrictUnits during working hours. The supplier shall be required to bear all risks of loss, leakage or damage and shall deliver the goods in good condition to the consignee at the destination mentioned in the order.

7. Rate for all articles having difference in size should be quoted as size wise rates. If the rate varies on the basis of make, model & platform, it should be clearly quoted separately.

7(A). Price Bids and Ranking of Financial Bids:

   1. The Tender will be decided on the basis of total cost,(Inclusive of all taxes and any other cost) of submission of the bill.

   2. Successfully Bidder will have to mention the basic price and tax amount separately at the time of submission of the bill.

   3. In case of any tax related dispute relating to GST, the Police Department shall not be liable to pay any additional tax; the tenderer shall be wholly responsible for the same. If, however, a situation of refund arises, the tenderer will have to deposit the total amount to the department.

   4. Statutory variation in the rate of GST, taking place between the closing date of tender and the due date of original delivery shall be to the Buyer's account once such a claim is raised by the seller. For claiming any change in price due to such Statutory variation, the seller shall have to lodge claim before the Buyer providing documentary evidence of change in rate of GST taking place after the closing day of bid submission and original due date of delivery Buyer

shall issue necessary amendment in the contract to enable generation of supplementary invoice or revised invoice as the case may be.

5. During the extended delivery period, in the event of an increase in GST rates, the same shall be borne by the seller; and if there is a reduction of GST rates the benefit shall accrue to the purchaser.

8. The tenderer should sign the tender form, copy of the general terms and conditions at EACH page and ALSO at the end as a token of acceptance of all the terms and conditions of the tender and specification also.

9. In case of imported equipment, their cost and custom duty should be mentioned separately. In case of custom duty exemption from Govt. of India, the certificate can be provided for the same by department. Tenderers must ensure that items are custom duty exempted or not as per serial no. 20(a) of specific clause of Notification No. 39/96-Cus dated 23-07-96 (under which CDEC is being sought)

10. Rates of Goods/Items must be mentioned in Indian Currency only. Department shall not be responsible for any variation in the rates of foreign currency *vis-a vis* Indian currency. No correspondence in this regard will be entertained.

11. Technical bid should include information related to all the specification sought. It should also contain company brochures of all equipments, applied for, and should have the relevant technical documents issued by the manufacturer in support of specification asked for.

12. Tenderer shall submit the deviation chart in relation to the specification of all equipments ask for.
Tenderer must submit the details of compliance of specifications of proposed item along with the name and make of models quoted in tender for supplies. For this purpose, a compliance sheet indicating page numbers of specification of proposed item with categorical 'Yes' or 'No' be mentioned.

13. Any advanced or additional feature of the items should be clearly mentioned in the specification sheet.

14. If the product is certified by recognized institution, relevant documents should be included in the technical bid.

15. If the items/products are certified by any authorized/recognized institution, tenderer should submit the related certification.

16. Tenderer must submit copy of supply order of other Police organization/Para military forces of last 5 years or submit at least 3 supply order.

17. Tenderer must submit original authorization of OEM Company for participating in the tender for a particular item. Photocopy of authorization certificate will not be acceptable.

18. Tenderer should provide non blacklisting certificate for last THREE years. The certificate should state clearly that the proprietor (in case of Propriety firm), all directors (in case of a Company), all partners (in case of Partnership firms and also Limited Liability Partnership firms) of the present firm (which is taking part in the tender process) have not been part of any company/firm which has been blacklisted with these individuals as incumbents in office of the blacklisted firm.

19. Tenderer should mention name, address phone/fax numbers of authorized service centers in the technical bid.

20. Minimum yearly turnover of the firm in last three years should be approximately 50% of the project cost.

21. Firms should submit only required documents in the technical bid. **Numbering of all the pages of technical bid is compulsory.** Checklist of all the important documents should also be enclosed in technical bid.

22. Technical bid of each tender must be accompanied by an earnest money deposit as mentioned. Earnest Money can be submitted cash online or by means of instruments such as Demand Draft/Bankers Cheque/Bank Guarantee/ Fixed term Deposit Receipt drawn in the name/account of department/indenting office and issued by a commercial bank. The validity of the Earnest Money instrument so deposited shall not be less than 45 days till after the last date of tender validity.

23. No adjustment of Earnest Money, out of pending bills amount, will be allowed. The tenders received without earnest money or with less than prescribed earnest money will not be considered.

24. After the final decision on the tenders, the earnest money of tenderers whose tenders have not been accepted shall be refundedwithin 30 days of the last date of tender validity. The earnest money of those tenderers, whose tenders have been accepted, shall be treated as security. It will be returned after submission of security deposit 3% of the total cost of items by successful tenderers, within 15 days of receipt of supply order. Thus total 3%of the cost of items deposited shall be treated as security deposit against supply order for the **warranty period as mentioned in specification of equipment(s).**Security deposit can be submitted in cash online or by means of instruments such as Demand Draft/Bankers Cheque/Irrevocable Bank Guarantee/ Fixed term Deposit Receipt drawn in the name/account of department/indenting office and issued by a commercial bank. The validity of the Security deposit instrument so deposited shall not be less than 60 days till after the last date of all tender obligations including warranty periods. The offered instrument shall be verified from concerned bank.

25. Samples of the items whose cost is more than Rs.10,000 (Rupees Ten thousand only) need not be submitted. Instead, presentation/demonstration of these items may be mandatory at a date and place as intimated for this purpose.

26. No certificate will be provided to import any equipments/ items for demonstration purposes.

27. **Demonstration Programme:** Demonstration of the items will be held in S.B. PHQ Bhopal on as prescribed dates in tender time line.

28. The commercial bid shall be assessed only after being found suitable in technical demonstration. Information of financial bid opening will be intimated later.

29. The tenderer shall be deemed to have carefully examined the condition / specifications etc. of the goods/items to be supplied. If he has any doubt to the meaning of any portion of

these conditions, he shall, before submitting his tender/ quotation, refer the matter toAIG, S.B.(G) M.P., Bhopal and get clarification.

30. The quantities shown in the tender notice are approximate and can be increased / decreased as per requirement. The supplies shall be made according to the requirements of the department.

31. Tenderer shall not assign or sublet his contract or any part thereof to any other agency.

32. All goods/materials/items supplied shall be new and of best quality in every respect and as per the standards wherever applicable.

33. The Director General of Police reserves the power to relax or exempt any of the conditions of the tender for the reasons recorded for granting such exemption/relaxation.

34. In case goods/items other than those of the approved quality, make or size are supplied, they will be rejected and will have to be replaced within the period prescribed for the completion of the order by the supplier without extra cost. Any expenses or loss caused to suppliers as a result of rejection or replacement of supplies shall be entirely at the tenderer's cost. Any loss caused to the department or any expenses incurred by the department in this shall be recoverable from the tenderer.

35. The rejected articles must be removed by the tenderer from the Stores, Special Branch, M.P. Bhopal/ F.O.R. units within 15 days of the date of information of rejection. The In-charge Stores will be responsible for any loss, damage and shortage that may occur to them while they are in the premises of Stores, Special Branch, M.P. Bhopal for the stipulated time. If tenderer does not remove rejected articles within 15 days of rejection, tenderer will be responsible for any loss, damage and shortage to such rejected articles. Further, a demurrage charge shall be calculated and paid similar to the penalty clauses, on the cumulative value of the goods rejected and on a period calculated from the date of the letter intimating the rejection of sub-standard goods supplied.

36. Failure of the supplier to collect the rejected goods within six months from the date of intimation thereof, would render such goods liable for forfeiture, and the department shall be free to dispose of such goods in the manner deemed fit by the Director General of Police, MP

37. The Director General of Police, MP Bhopal or his duly authorized representative shall have access at all reasonable times, to the suppliers premises and shall have the power to inspect and examine the materials and workmanship of goods before supply.

38. The tenderer shall be responsible for the proper packaging of the goods so as to avoid damages under normal conditions of transport by sea, rail, road or air and for delivery of the material in good conditions to the consignee at destination. In the event of any loss, damage, breakage, leakage or any shortage tenderer shall be liable to make good of such loss and shortage found at the time of checking/inspection of the materials by the consignee. No extra cost on such account shall be admissible to him.

39. The successful tenderer shall arrange supplies of goods - in the specific terms and conditions of the supplies and at the place of destination, within 45 days from the date of placing the order. The date of placing the order shall be the date of dispatch of order or the delivery thereof to the tenderer when such order is being delivered through representative of tenderer.In case of purchase of reserved items supply period shall be as intimated by the supplying organization.

40. In case of repeat purchase order the supply period will be 45 days.

41. If the supplier firm fails to supply goods within stipulated delivery period and also does not request for extension of delivery period then the supply order stands cancelled and the security deposit shall be forfeited by the department. In addition, the supplier firm shall be blacklisted for a definite period of 3 years, during which no supply order would be given to the blacklisted firm by all Governmentdepartments.

42. The goods shall be delivered at the destination in perfect condition. The supplier if so desires, may insure the valuable goods against loss by theft, destruction or damage by fire, flood, undue exposure to weather or otherwise. The expenditure thereon shall be borne by the supplier.

43. The number of samples required for destructive testing has to be supplied by the supplier in addition to the quantity mentioned in the purchase order, at its own cost, as per the testing norms. The samples shall be picked up randomly for testing purpose.

44. The supplier shall bear commission charges on remittances made in settlement of their claims.

45. The contract of supply can be repudiated at any time if the supplies are not made to the satisfaction of the Director General of Police, MP.

46. Neither Railway Receipt will be accepted by VPP nor freight to pay Railway Receipt will be accepted.

47. The tenderer shall invariably furnish complete addresses of the premises of his office, godown and workshop with full name, phone nos. and address of the person who is to be contacted, for the purpose of inspection.

48(A) In case of request by supplier firm for extension of delivery period, the same may be done, after approval of the officer approving the purchase, in writing, only once for a maximum duration of 60 days, together with late delivery charges. The upper limit of 60 days may be relaxed only in special circumstances with justification and with the approval of DGP, MP. Any subsequent extension (beyond the first)of the delivery period can be approved only by DGP, MP.
(B) There shall be no late delivery charges for supply within the stipulated delivery period. For supply made during the 'extended' delivery period (first extension) late delivery charges shall be deducted at the rate of 0.50 % per week of the value of supply during the 'extended' delivery period. For supply made during any 'subsequent extended' delivery period (approved by DGP, MP) shall be 1% per week of the value of supply during the 'subsequent extended' delivery period. The late delivery charges shall not be more than 10% of the overall purchase price.

49. If the goods are supplied after the stipulated delivery period, then for the purpose of computing penalty, the week shall be counted as if the supply was made on the last day of that week. For example, if the supply of goods is made after the delay of 06 weeks and 4 days then the penalty shall be computed for 07 weeks of delay.

50. Payments would be made only after the receipt of all the items ordered in the supply order(except in cases where provision for part payment has been specifically mentioned in the tender conditions/specifications/work order/purchase order). In cases where part supply has been made and the supply order for the remaining items has been cancelled, payment would be made for the supplied items after deducting the penalty as 5% of the value of the non-supplied itemsand the security deposit/performance guarantee may be forfeited.

51. If the tenderer is unable to complete the supply or fails to comply with the terms and conditions of the tender within the stipulated or extended period, the DGP, MP shall be at liberty to arrange supply either through re-tender or otherwise. The Director General of Police may give seven days notice in writing to the approved supplier to complete the supplies or make good the failure, neglect or contravention complained of. If the contractor fails to comply with the notice within seven days of the date of the service, and if the Director General of Police thinks fit, he may direct the supplier to make good the loss sustained or any expenditure incurred by the Government in arranging the suppliers through any other agency. He may also use the earnest money/security deposit of the contractor to make good such a loss.

52. The supply period and penalty to be imposed, on purchase order of imported/ foreign goods, will be decided based on the facts, circumstances and nature of the goods. The Director General of Police reserves the right to take the final decision.

53. The successful tenderer shall execute an agreement on a non judicial stamp of Rs.1,000/- or of such value as may be prescribed by the law on the subject for contract deeds in the prescribed form, within 15 days from the date he is informed of the acceptance of his tender for the due performance of the contract. In case of failure of the execution of agreement within the specified period, the order is liable to be cancelled. The expenses on completion and stamping the agreement shall be borne by the supplier who shall furnish free of charge copy of the agreement duly executed and stamped to the Director General of Police, M.P., the other copy should be without non judicial stamp.

54. No advance payment shall be made except in very rare and special cases for which reasons shall be recorded in writing. Payment shall be due and payable by the Director General of Police, MP on behalf the Governor only when the supplied quantity has been delivered, inspected and accepted by the Technical Committee appointed by the Director General of Police, MP and certificate of having done so is recorded by the committee. In case of disputed items 10 to 25 % of the amount shall be withheld and shall be paid on settlement of the dispute items of the award granted progressive payments if agreed to, will be made according to the terms entered in the agreements.

55. Upon breach of any of the General Terms and Conditions of contract and breach of the agreement by the supplier, it will be lawful for the department to forfeit the Earnest money/ Security Deposit in whole or part, or impose such penalty as deemed fit and recover the same from the Security Deposit or from any other payment to be made to the supplier or in any other manner as the deemed fit by the department, without prejudice to right of the department to recover any further sum of money as damages from the supplier.

56. Direct or indirect canvassing on the part of tenderers or their representatives will disqualify their tenders.

57. The Director General of Police, MP, reserves the right to accept any tender, not necessarily the lowest tenders and reject any tender, without assigning any reasons thereof. Orders can be placed for the whole or part of the quantity or work at the discretion of the Director General of Police, MP.

58. In case of imported equipment, DGFT License should be obtained by firm within a time period of maximum 90 days from the date of purchase order. If the firm fails to obtained DGFT License within stipulated period, department will be free to cancel the purchase order.

59. **Performance Clause**: In case the supplier fails to abide by the terms and condition; or to maintain the required technical/operational staff / equipment; or there is change in it production/service line affecting its performance adversely, or fails to cooperate; or there is

repeated non-performance or performance below specified standards (Including after sales services and maintenance services)- in all such cases the department shall blacklist the vendor firm for a specified period as deemed fit by the Competent Authority. This action shall be in addition to any monetary claim due to be realized from the vender.

60. **Force Majeure Clause**: The vendor shall not be liable for any failure of or delay in the performance of the agreement (signed) for the period that such failure or delay is beyond the reasonable control of a party or materially affects the performance of any of its obligations under the agreement (signed), and could not reasonably have been foreseen or provided against; but will not be excused for failure or delay resulting from only general economic conditions or other general market effects.

61.**Grievance Resolution Clause**: A Grievance arising directly between the Firm and the Department concerning the interpretation, application or alleged violation of the agreement shall be originated at the level of the Firm CEO/head within 14 calendar days following the circumstances giving rise to the grievance. All such grievances shall be addressed to DGP MP for their resolution.

62. **Dispute Resolution Clause**:Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this tender/contract or the validity or the breach thereof shall be settled under Indian Laws through civil courts having seat at Bhopal, MP.

63. **Indemnification Clause**: The participating Vendor/Firm agrees that in case of award of contract to Vendor/Firm, they shall hold harmless and indemnify the tendering Department(including its officers/incumbents) from any and all losses, liabilities, deficiencies, costs, damages and expenses, arising out of Vendor's/Firm's negligence, whether it be sole or in connect with others, in connection with performance of the services described herein. The maximum aggregate liability of the tendering department shall not exceed the portion of the purchase price of work/product paid by the department hereunder. In no event shall the Vendor/Firm be entitled to recover consequential or punitive damages resulting from a breach or violation of this Agreement.

**Seal and signature of proprietor/
manager representative of the firm
on behalf of the firm giving tender**

Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the MP TENDERS Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the MP TENDERS Portal, prepare their bids in accordance with the requirements and submitting their bids online on the MP TENDERS Portal.

More information useful for submitting online bids on the MP TENDERS Portal may be obtained at: https://mptenders.gov.in/nicgep/app

REGISTRATION

1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://mptenders.gov.in/nicgep/app) by clicking on the link "**Online bidder Enrollment**" on the MP TENDERS Portal **which is free of charge.**

2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the MP TENDERS Portal.

4) Upon enrolment, the bidders will be required to register **their valid Digital Signature Certificate** (Class II or **Class III Certificates with signing key usage**) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.

5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

1) There are various search options built in the MP TENDERS Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the MP TENDERS Portal.

2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the MP TENDERS Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or ''Other Important Documents'' area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.

4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should

save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

8) Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

9) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2) Any queries relating to the process of online bid submission or queries relating to MP TENDERS Portal in general may be directed to the 24x7 MP TENDERS Portal Helpdesk.

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Special Branch, Madhya Pradesh Bhopal
Specification of CCTV Surveillance System

A-Scope of Work
1. Madhya Pradesh Special Branch is in the process of provisioning of CCTV surveillance system at **"High court Jabalpur, Indore and Gwalior"**.
2. CCTV surveillance system is for keeping an eye on the High court campus for unwanted activity and suspicious movement. All cameras will transmit their video feed to centralized control room, where the feed of all cameras can be previewed live and data can be stored for period of 60 days. Proposed system shall also have capability to capture number plate and driver image of entry & exit vehicles at the gate.
3. Madhya Pradesh Special Branch intend to select System Integrators (SIs) for Supply, Installation, Testing, Commissioning, Migration, Operations and Management of CCTV surveillance system, on premises infrastructure including On-site manpower for five years at High court Jabalpur, Indore and Gwalior with a definite Service Level Agreement (SLA).
4. The selected bidder shall ensure the successful implementation of the proposed solutions as well as provide capacity building support.
5. Any functionality not expressly stated in this document but necessary to meet the needs of the successful operations of the system shall essentially be under the scope of bidder and for that no extra charges shall be admissible.
6. Bidder shall implement and deliver the systems and components which are described in this RFP.

B- Objective
1. High court Security and Access Control
2. Prevention of Crime
3. To investigate crime or terrorist activity
4. Crowd control
5. Vehicle control
6. Analytics for Command and Control Centre

C-Site Survey
1. Bidders will be responsible for site survey to identify and analyse the exact situation of the site.
2. Bidders should analyse the site requirement, its present status, applications hosting plan, the existing infrastructure and any other relevant details before designing the CCTV solution.
3. Before doing site survey permission shall be obtained from the user agency.

D- Supply & Installation
Bidder shall use industry leading practices during the implementation w.r.t positioning and mounting the cameras, poles and junction boxes.

Check-points that need to be adhered to by the Bidder while installing / commissioning cameras are as follows:-

1. Ensure surveillance objective is met while positioning the camera such that the required field of view is being captured as finalized in field survey.
2. Ensure camera is protected from the on-field challenges of weather, physical damage and theft.
3. Make proper adjustments to have the best possible image / video captured.
4. Ensure that the pole is well placed for vibration resistance adhering to the road safety norms.
5. Collusion preventive barriers around the junction box & pole foundation in case it's installed in collision prone place.
6. Appropriate branding or colour coding (Police/Authority Branding) of poles and junction boxes, to warn mischief mongers against tampering with the equipment at the junction.
7. Bidder shall arrange power supply for the proposed solution at all desired locations.
8. Bidder shall comply with lightning-protection and anti –interference measures for system structure and equipment's.
9. Earthing should be done for the entire system at all junction boxes and control room.
10. Bidder shall provide the Junction Boxes, posts and cantilever to mount the field sensors like the cameras, active network components, controller and power backup (UPS) at all field locations, as per the specifications.
11. Bidder shall provide standardized cabling for all devices and subsystems.
12. Bidder shall ensure the installation of all necessary cables and connectors between the field sensors /devices assembly, outstation junction box, for pole mounted field sensors/devices the cables shall be routed down the inside of the pole and through underground duct to the outstation cabinet.
13. All cables shall be clearly labeled with indelible indications that can clearly be identified by maintenance personnel. The proposed cables shall meet the valid directives and standards and the bidder shall ensure the proper route marking for outdoor cables.
14. Cabling must be carried out per relevant BIS standards. All cabling shall be documented in a cable plan by Bidder.
15. The Bidder shall be responsible to provide networking solution and may assume that data rate of 5 Mbps per camera required at various locations.
16. Bidder will be required and should do component sizing accordingly to connect all locations.
17. Surge Protection devices shall be provided for outdoor equipment like cameras, racks, switches on both side of network, power source at Field rack, switch and control room racks, Ethernet+ PoE for junction equipment's and Control room equipment's.
18. For installation of L2 switches at various floors, Supplier shall have to install the Ethernet Switches along-with mini racks in the locations. The Supplier shall have to install LIU / Patch-panels for termination of OFC & CAT-6 cables for the connectivity of Switches & cameras. Supplier shall also arrange for extending the required AC Power cables to these Switches and their associated items.

19. CCTV Management Servers, Storage, L-3 Switches etc, shall be installed Control Room along with equipment racks. OFC cabling shall have to be carried out as per the requirement.

20. For outdoor CCTV cameras, OFC along-with AC Power/Wireless , Cable shall have to be laid between the Control Room / the nearest location of L-2 Ethernet Switch & camera location, the cables shall be laid below the soil-level and following the industry standard procedure for laying of outdoor underground cables. In this case, Media Converters shall be used in both the ends for converting the media from OFC to Copper Ethernet. Supplier shall take-up the activities for installation of junction-boxes etc. for housing the Media Converters & UPS / Power Adapters for the powering up of Cameras, Media Converters etc.

E- Architecture

The IP CCTV Surveillance System shall mainly comprise of:

- Outdoor IP Fixed CCTV Cameras
- Indoor IP Fixed CCTV Cameras
- Outdoor IP PTZ CCTV Cameras
- ANPR Cameras
- Managed Layer-2 Ethernet Switches: These switches shall be placed at different floors of the building for catering the Ethernet LAN connectivity and Power over Ethernet (PoE) for all the IP CCTV Cameras, the Layer-2 Ethernet Switches shall be connected to each other over OFC for backbone link.
- Managed Layer-3 Ethernet Switches: These switches shall be placed along with Server & External Storage. They shall be connecting to the Layer-2 Ethernet Switches, External Storage and to each other over OFC for backbone link and to other CCTV Surveillance System hardware over CAT-6. Here also, minimum two numbers of Layer-3 Ethernet Switches shall be installed and the connectivity between Layer-3 & Layer-2 switches shall form a ring over OFC for connectivity-redundancy purpose.
- Database Servers and Client PCs: Highly efficient Servers for operating as Video Recording & Management Systems and Database Servers. The Database Servers shall be containing a database of all the cameras connected to the network and their configurations. These Servers shall also host the highly efficient Client PCs for live viewing, PTZ controlling, playback and recording of the cameras as well as other activities as per specification. The Servers or Client PCs, to be installed in the Control Room, shall act as an administrator station on the LAN that shall manage and control the entire CCTV system and assign rights and permissions to all the client station(s). Along with all application software, these servers shall also host the Video Analytic Software. These Servers shall be in N+1 configuration for hardware-redundancy and failover purpose.
- External Storage: The external Storage with its controller shall have such a redundant architecture that there shall not be any single point of failure.
- All the Systems/Subsystems offered shall meet the minimum standards as stated in the Technical Specifications.

Proposed Network Architecture
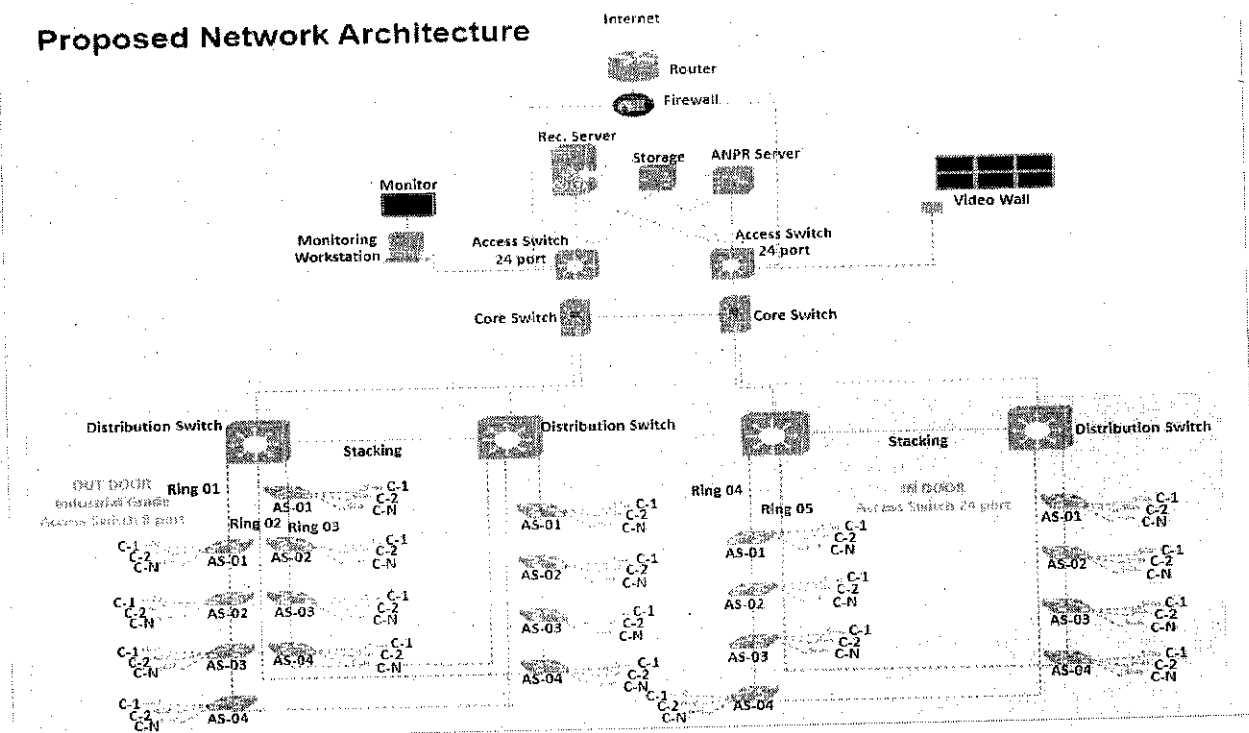
F-BOQ

The BOQ mentioned below are indicative and minimal. Bidders will be responsible for the site survey before proposing CCTV solution. The exact quantity and requirement shall be proposed as part of the technical proposal of Bidder.

BOQ Jabalpur

S.No	Item	Quantity
1	4 MP IR ANPR camera with License and ANPR Software	10
2	4MP IR Bullet Outdoor Network Camera	100
3	4MP IR Indoor Network Camera	215
4	4MP IR PTZ Camera	25
5	Video Management System	1
6	Central server for VMS ,ANPR and analytics with (N+1 redundancy)	5
7	Video Analytics license @ cameras (Bullet/PTZ/Indoor)	35
8	Network Access switch L2	as per site requirement
9	Network Core switch L3 (1+1) configuration	as per site requirement
10	Outdoor Industrial Grade 8 port switch	as per site requirement
11	Distribution Network switch & accessories	as per site requirement
12	Computing & storage Equipment & Accessories	as per site requirement
13	Storage	provision of retention for minimum 60 days
14	Next generation Firewall with IPS and IDS	1
15	Network Equipments & Accessories	as per site requirement

S.No	Item	Quantity
16	Junction Box	as per site requirement
17	Surge Protection Device	as per site requirement
18	Outdoor armored rated cat 6 cable	as per site requirement
19	Double jacket cat 6 cable for indoor	as per site requirement
20	Optical fiber cable	as per site requirement
21	Online UPS (2 Hr backup) for all PTZ, Dome and bullet cameras	as per site requirement
22	Online UPS (2 Hr backup) for Control room (N+1) redundant	1
23	70"*4 Video wall with Mounting Accessories and video wall controller	1
24	55" * 2 LED TV 4k for ANPR application	1
25	55" LED TV with connectivity and license for separate monitoring of CCTV at supervisor room	1
26	Monitoring Desktop with two number of 22" LED monitors	8
27	Laptop	4
28	Other Software's (If required)	as per site requirement
29	Supply ,Installation and civil work with poles and masts and other required accessories	as per site requirement
30	Smart Network rack 42 U for all equipment's at control room with complete electric fittings	1
31	Air Conditioner 2 Ton	8
32	Network & power cables & Accessories	as per site requirement
33	Joystick controller for PTZ cameras	as per site requirement
34	Onsite replacement warranty and complete maintenance for entire system from the date of check test	5 years
35	Internet 100 mbps connection with static IP	1
36	Router	1
37	Network monitoring system (NMS)	1 lot
38	All in one colour printer	1
39	Running, operation for surveillance system for 5 years replacement warranty period. 2 skilled operator and 1 service engineer shall be provided by bidder to run the whole system.	5 years
40	Customized furniture for control room	1 lot

BOQ Indore

S.No	Item	Quantity
1	4 MP IR ANPR camera with License and Software	5
2	4MP IR Bullet Outdoor Network Camera	50
3	4MP IR Indoor Network Camera	225
4	4MP IR PTZ Camera	10
5	Video Management System	1
6	Central server for VMS ,ANPR and analytics with (N+1 redundancy)	5
7	Video Analytics license @ cameras (Bullet/PTZ/Indoor)	35

S.No	Item	Quantity
8	Network switch L2	as per site requirement
9	Network switch L3 (1+1) configuration	as per site requirement
10	Outdoor Industrial Grade 8 port switch	as per site requirement
11	Distribution switch & accessories	as per site requirement
12	Computing & storage Equipment & Accessories	as per site requirement
13	Storage	provision of retention for minimum 60 days
14	Next generation Firewall with IPS and IDS	1
15	Network Equipments & Accessories	as per site requirement
16	Junction Box	as per site requirement
17	Surge Protection Device	as per site requirement
18	Outdoor armored rated cat 6 cable	as per site requirement
19	Double jacket cat 6 cable for indoor	as per site requirement
20	Optical fiber cable	as per site requirement
21	Online UPS (2 Hr backup) for all PTZ, Dome and bullet cameras	as per site requirement
22	Online UPS (2 Hr backup) for Control room (N+1) redundant	1
23	70"*4 Video wall with Mounting Accessories and video wall controller	1
24	55" * 2 LED TV 4k for ANPR application	1
25	55" LED TV with connectivity and license for separate monitoring of CCTV at supervisor room	1
26	Monitoring Desktop with two number of 22" LED monitors	8
27	Laptop	4
28	Other Software's (If required)	as per site requirement
29	Supply ,Installation and civil work with poles and masts and other required accessories	as per site requirement
30	Smart Network rack 42 U for all equipment's at control room with complete electric fittings	1
31	Air Conditioner 2 Ton	8
32	Network & power cables & Accessories	as per site requirement
33	Joystick controller for PTZ cameras	as per site requirement
34	Onsite replacement warranty and complete maintenance for entire system from the date of check test	5 years
35	Internet 100 mbps connection with static IP	1
36	Router	1
37	Network monitoring system (NMS)	1 lot
38	All in one colour printer	1
39	Running, operation for surveillance system for 5 years replacement warranty period. 2 skilled operator and 1 service engineer shall be provided by bidder to run the whole system.	5 years
40	Customized furniture for control room	1 lot

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S.No	Item	Quantity
1	4 MP IR ANPR camera with License and Software	5
2	4MP IR Bullet Outdoor Network Camera	20
3	4MP IR Indoor Network Camera	210
4	4MP IR PTZ Camera	15
5	Video Management System	1
6	Central server for VMS ,ANPR and analytics with (N+1 redundancy)	5
7	Video Analytics license @ cameras (Bullet/PTZ/Indoor)	25
8	Network switch L2	as per site requirement
9	Network switch L3 (1+1) configuration	as per site requirement
10	Outdoor Industrial Grade 8 port switch	as per site requirement
11	Distribution Network switch & accessories	as per site requirement
12	Computing & storage Equipment & Accessories	as per site requirement
13	Storage	provision of retention for minimum 60 days
14	Next generation Firewall with IPS and IDS	1
15	Network Equipments & Accessories	as per site requirement
16	Junction Box	as per site requirement
17	Surge Protection Device	as per site requirement
18	Outdoor armored rated cat 6 cable	as per site requirement
19	Double jacket cat 6 cable for indoor	as per site requirement
20	Optical fiber cable	as per site requirement
21	Online UPS (2 Hr backup) for all PTZ, Dome and bullet cameras	as per site requirement
22	Online UPS (2 Hr backup) for Control room (N+1) redundant	1
23	70"*4 Video wall with Mounting Accessories and video wall controller	1
24	55" * 2 LED TV 4k for ANPR application	1
25	55" LED TV with connectivity and license for separate monitoring of CCTV at supervisor room	1
26	Monitoring Desktop with two number of 22" LED monitors	8
27	Laptop	4
28	Other Software's (If required)	as per site requirement
29	Supply ,Installation and civil work with poles and masts and other required accessories	as per site requirement
30	Smart Network rack 42 U for all equipment's at control room with complete electric fittings	1
31	Air Conditioner 2 Ton	6
32	Network & power cables & Accessories	as per site requirement
33	Joystick controller for PTZ cameras	as per site requirement
34	Onsite replacement warranty and complete maintenance for entire system from the date of check test	5 years
35	Internet 100 mbps connection with static IP	1

S.No	Item	Quantity
36	Router	1
37	Network monitoring system (NMS)	1 lot
38	All in one colour printer	1
39	Running, operation for surveillance system for 5 years replacement warranty period. 2 skilled operator and 1 service engineer shall be provided by bidder to run the whole system.	5 years
40	Customized furniture for control room	1 lot

Bids should be submitted as per the Preferred OEM table for each item mentioned below-

S.No	Component/Item	OEM List
1	Electrical Cables & Accessories	Anchor, Havells, Finolex, RR Kabel, Polycab
2	Network Cables & Accessories	RR Kabel, Havells, Dlink, HPE, Dell, Netgear, Cisco
3	Network Equipments & Switch etc	Cisco, Arista, juniper, Dell, HPE
4	AC	LG/Samsung/ Voltas/Carrier/ Daikin / Bluestar/ O-general
5	Surge protection device	Citel, MTL, DEHN
6	Storage solution	Dell, HPE, Cisco
7	Workstation and laptop	HPE, Dell, Lenovo
8	TV	LG, Samsung, Sony
9	Videowall	Delta , Barco, LG, Samsung
	The OEM & vendors are requested to forward information of the product (Make& Model) which they can offer and also forward correct specification of there system against each parameter along with complied or not complied remarks.	

F -Technical Specifications

The specifications indicated below are minimal specifications and the vendor may suggest higher /better / latest specifications, so as to insure the optimal performance of the system.

1) 4MP IR Bullet Outdoor/Indoor Network Camera/ANPR Camera

Parameter	Specification
Image sensor & Resolution	1/2.8" or better CMOS Progressive Scan & Minimum (4 MP) or better
Electronic Shutter speed	1/4 to 1 / 32,000 s or better
Min illumination/ light sensitivity (Colour)	Minimum 0.5 lux (30 IRE, F 1.2) or better
Min illumination/ light sensitivity (B/W)	Minimum 0.2 lux (30 IRE, F 1.2) or better
Wide Dynamic Range	Minimum 140 Db or better
Backlight Compensation	ON/OFF
IRIS Control	Automatic
Focus	Autofocus
Automatic Gain Control	Auto / Manual
Colour, Brightness, Contrast	functionality Required
Frame Rate	30 FPS for **4MP** at H.264 Compression or better

Parameter	Specification
Varifocal Lens **Bullet**	2.7-13 FPS for **4MP** at H.264 Compression or better
Varifocal Lens ANPR	**5- 50 mm varifocal lens or better**
Video	
Day and Night functionality	Automatic, Colour, Mono. Should automatically switch to night vision mode by sensing the illumination level.
IR illuminator outdoor/ANPR	Illuminator may be Internal or external & visibility should be at least 50 m
IR illuminator indoor	Illuminator may be Internal or external & visibility should be at least 25 m
Video Resolution	Minimum 4 MP
Video Streams	Individually configurable 02 video streams (H.264, MJPEG) or better
Intelligent Video for Indoor and outdoor (Dome/Bullet)	Motion detection, Tampering Alert, Perimeter, Abandoned/Removed, Enter, Exit, Crowd.
Audio	
Audio support (Micro phone)	Required
Audio Compression	Minimum G.711 or better
Network & Interface	
Interface	RJ-45 for 10/100 base-T Ethernet
Upgrade	Through web browser , online, firmware upgrade
Network Protocols support	IPv6, TCP/IP, HTTP, , DHCP, UDP, DNS, SMTP, RTP, RTSP, SNMP protocols/Should meet all functional requirement of the project
Network disconnection Alarm	Required
Compliance	ONVIF Profile **S,G,T,M or better**
Security	
Password Protection	Required
HTTPS encryption	Required
IEEE 802.1X	Required
General	
Operational temperature °C and humidity	Should be able to withstand Bhopal weather (0 to 50 degree Celsius)
IP rating	**IP67**
Certifications	**UL and BIS and CE/EN/FCC,IK10**
Power	**PoE / PoE+ and12 VDC/ 24VDC/ 230VAC** **Vendor has to supply suitable power for the cameras.**
Local Storage/SD card	Camera shall be provided with SD card of 128 GB. In the event of failure of connectivity to the central server the camera shall automatically record video locally on the SD card. After the connectivity is restored these SD card based recordings shall be automatically merged with the server recording.

2) 4 MP IR PTZ Camera

Parameter	Specification
Image sensor & Resolution	1 / 2.8"or better CMOS Progressive Scan and 4 mega pixel
Focal Length	5.2 - 156mm, or better
Zoom	30 x Optical ,12 x digital or better
Electronic Shutter	1/1 to 1 / 10,000 s or better
Min illumination/ light sensitivity(Colour)	0.5 lux (30 IRE, F 1.6) or better
Min illumination/ light sensitivity (B/W)	0.2 lux (30 IRE, F 1.6) or better
Wide Dynamic Range	Minimum 120 Db or better
Backlight Compensation	ON/OFF
IRIS Control	Automatic
Focus	Autofocus
Automatic Gain Control	Auto / Manual
Frame Rate	30 FPS for **4MP** at H.264 Compression or better
Video	
Day and Night functionality	Automatic, Colour, Mono. Should automatically switch to night vision mode by sensing the illumination level
Video Resolution	4 Mega pixel or better
IR illuminator	Internal / External Illuminator & visibility should be at least 200 m: IR Illuminator should cover 360 degree area.
Video Streams	Individually configurable 02 video streams (H.264, MJPEG);
Intelligent Video	Motion detection, Tampering alert, Network loss
Electronic Image Stabilization	Required
PTZ Function	
PAN TILT Range	360° continuous pan & 90° tilt range
PAN TILT Speed	**0.5° to 150°/sec for panning & 0.5° to 100°/sec for tilting & Up to 300°/s for Preset speed.**
Presets	Minimum 150 Preset Points
Preset Tour & Pattern	Required
Privacy Mask	08 Zones or better
Compression	
MJPEG	Required
H.264	Required
Audio	
Audio support	Required
Audio Compression	G.711 or better
Network & Interface	
Interface	RJ-45 for 10/100 base-T Ethernet
Upgrade	Through web browser , online, firmware upgrade
Network Protocols support	TCP/IP, HTTP, DHCP, UDP, DNS, SMTP, RTP, RTSP, SNMP protocols
Alarm Event	Events / alerts send via FTP, HTTP, email, Pre-Post alarm video buffering.
Network disconnection Alarm	Required
Compliance	ONVIF Profile S,G,T,M or higher

Parameter	Specification
Security	
Password Protection	Required
HTTPS encryption	Required
IEEE 802.1X	Required
General	
Operational temperature °C &Humidity	Should withstand Bhopal weather(0 to 50 degree Celsius)
IP rating	IP 67
Power	PoE / PoE+ and12 VDC/ 24VDC/ 230VAC Vendor has to supply suitable power for the cameras.
Certifications	UL and BIS and CE/EN/FCC,IK 10
Local Storage	
SD card	Camera shall be provided with SD card of 128 GB. In the event of failure of connectivity to the central server the camera shall automatically record video locally on the SD card. After the connectivity is restored these SD card based recordings shall be automatically merged with the server recording.

3) VMS Software

S.No	Specifications
1	The system should be easy to install, learn, operate and manage: The VMS must have rich user interface that provides one-click access, drag-drop, menu, customizable GUI etc. to enhance operational efficiently in daily tasks and maintain The VMS shall have ability to respond fast & shall be applicable to all processes, functions, features, and screens of a video management system.
2	Simple, clear documentation including User Guides (how to use the product) and Technical Reference Manuals (quick reference on functions and procedures) shall be submitted
3	Scalability: The proposed video management system shall be able to support any no. of CCTV Cameras so as to accommodate any future expansion System shall support viewing of video from multiple locations and by multiple users. The VMS shall support 500 or more cameras. Well documented Software Development Kit (SDK): The SDK should include a rich, easy-to-use Application Programming Interface (API) support if required. Input and output support: The VMS shall have ability to receive and support recording based on inputs or alarms. Event management: The VMS shall have ability to enforce custom settings for event detection, alarm notification, recording, input/out (I/O) control, and other features in response to events. The alarm management module shall support graphical displays with interactive icons to display the status of the cameras & other inputs. Support for standard protocols: The VMS shall have ability to maintain independence from any one vendor & shall support open standard protocol i.e. ONVIF profile S
4	Smooth software upgrade path for support of new devices, drivers and operating systems. System should be able to implement software upgrades without requiring all hardware components to be reconfigured.

S.No	Specifications
	System should provide Database Server Hot Redundancy from day one, Camera Server Hot Redundancy, and automatic fault tolerance for robust system uptime and Distributed database and video storage.
5	On screen help and instructions: The system should provide help and assistance through help guide on same station.
6	User management with user roles & privileges right to view, acknowledge alarms shall be available
8	Centrally controlled user management - Users, roles, rules and privileges should be stored on the central VMS server allowing any authorized user to log into any workstation.
9	Recording Server: · The System shall not restrict the number of recording servers · Shall support dual streaming · Shall allow each camera to be viewed independently by client viewer. · Recording from connected cameras shall be stored in NAS/SAN · Shall support multiple storage form · Shall support recording in all resolution at desired FPS · Shall support video cum audio recording
10	The VMS shall have ability to configure access privileges and other parameters for all users.
11	Support for event based or schedule-based recordings to optimize bandwidth and storage
12	Customizable recording retention period for specific camera.
13	Remote Users: Should support at least 10 remote users via network/web browser/client software
14	Wizard driven installation of software updates for VMS server and client machines
15	Support and configuration options for virtual matrix.
16	Copy or Clone option to install new device based on already configured device.
17	The VMS shall have ability to easily install, configure, modify, search and remove surveillance devices with automatic discovery of IP devices using external tool or in built options.
18	Option to install other devices like Analog cameras, encoders, microphone-speakers.
19	The VMS shall have ability to logically group devices based on installation location & device type.
20	The VMS shall have ability to search and view device(s) based on standard criteria like Camera ID/ Name, Location, Group, etc.
21	The VMS shall have ability to enforce access privileges (View /Add /Edit/ Remove) to device(s).
22	The VMS shall have ability to draw and configure map of surveillance facility, choose back-ground images, User-definable symbols (for deployed devices)and programmable functions, e.g., hyperlinks, controlling video feed, initialling alarms etc.
23	Remote firmware updates notifications and wizard driven installation shall be part of camera feature.
24	Provision for independent storage settings for individual camera feeds.
25	The VMS shall have ability to configure multiple streams with different quality parameters e.g. Codec (H.264, MPEG, JEPG) , resolution, frame & bit rate etc.
26	Support for full duplex audio
27	a) The VMS shall have ability to create and assign pre-configured views/layouts for

S.No	Specifications
	monitoring including features like:
	b) The VMS shall support Sequencing in Views, whereby the pre-sets of PTZ cameras as well as fixed cameras are cycled on a timed basis, within a single view or within the view port of a multiple camera view.
	c) Linking images, maps a view,
	d) The VMS shall support sequence views. A sequence view consists of a single camera view, which can be cycled on a time basis. Pan-tilt-zoom cameras, which support pre-set positions, can have these pre-sets cycled on a time basis. In this way an operator can view a variety of pre-sets on a series of PTZ cameras. Fixed cameras can also be included in the sequence and cycled accordingly.
	e) Special views for widescreen monitors,
	f) Updating a view only on motion detection,
	g) Granting or revoking permission to use the view etc.
28	Setup Virtual matrix on operator workstation monitor
29	Basic recording options [Full, Scheduled recoding, Motion detection recording, external/internal hardware or software events / trigger-based recording]
30	Advanced recordings options [Video only, Video plus Audio, Retention rules, Archive/back-up rules, and storage limits report set.]
31	The VMS shall have ability to configure, store and track both pre- and post-event recordings. The pre-post event time should be configurable.
32	PTZ configuration including pre-sets, patterns, patrolling, masking, priority and permissions should be possible from camera web page
33	The VMS shall have ability to support operations from Web/IE client, Windows Client /Mobile devices etc. Popup display on the screen in case of any event/alarm/threshold etc.
34	Multiple monitor support: The system should allow connecting minimum 2 or more as per proposed Solution multiple monitors on single client workstation (loaded with suitable graphics card) and display different contents on each of the connected monitor.
35	All panes / tiles should indicate mode (live or recoded), source (camera name/location) and date/time and applied quality information (FPS, CODEC). A matrix view should support minimum 2x2, 3x3, 4x4 on small monitors and 9x9 formats on video wall and any number of multiple screen divisions.
36	PTZ controls: When PTZ is deployed and enabled, system should offer a separate control panel for PTZ operations. The control panel should include list of pre-sets, patterns, tours, eight directional & home positions and zoom-in & zoom-out buttons. A dedicated joystick can also be used for PTZ operations.
37	PC keyboard shortcut keys: Along with menu-driven interface, a VMS should also support shortcut keys to helps operators quickly switch between different cameras/matrix views.
38	Snapshots: System should allow creating a still image from live or recorded feed and storing it into a workstation.
39	Replay facility with timeline control to display and play back recorded video for one or more cameras. Playback shall be possible on 1 or more cameras simultaneously for all cameras currently displayed in the Video Workspace.
40	The VMS shall have ability to bookmark / add-to-favorites in both live and playback modes. Bookmarks shall be created, search, removed by the owner.
41	Digital zoom to enlarge portion of an image to provide superior zooming capability.
42	The VMS shall have ability to Start/Stop Recording on demand (manually).
43	Option to view surrounding cameras: The system should enable operators to

S.No	Specifications
	configure camera feed and based on group/subgroup details, its surrounding cameras should be automatically displayed on separate panes based on alarms.
44	Evidence export feature: The system should allow users to export audio/video evidence in open format for internal investigation or to share authentic proof to public authorities and outside agencies. Alternatively, the bidder may provide the required player/software to run the exported video file if the VMS does not support to export in avi or another standard format.
45	The VMS shall provide an advanced search of recorded video. The search shall be based on recording time, camera and recording details. Wildcards shall be accepted for the Point ID, description, area, priority and value for alarm/event activated recordings. Smart (motion) Search: The feature should enable users to select area of interest on any given view of camera recording, and search for motion incidents within that area
46	The VMS should have onscreen process guidance/help menu & instruction
47	The system should offer following playback controls · Play/Pause · Forward playback · Reverse playback · Frame forward · Frame rewind
48	Evidence Printing: Option to create and print a small surveillance report that includes image(s) and comments about recorded incident from command control system.
49	The system should enable users to view different graphics to preconfigured displays.
50	The system/camera should offer options to set Brightness, Contrast, Sharpness etc.
51	The VMS/VA system should have in-built, configurable, basic motion detection analytic engine that efficiently · Detects motion · Virtual line · Auto tracking / person annotations
52	The system should have event/alarm management module that allows generating, distributing, storing, tracking and reporting of incidents and events as they occur. The VMS shall have ability to: · System should support latched alarm. i.e. Alarms once reported, requires correction to be removed from the system. · Configure automatic/programmed responses based on priority and escalation level for specific event(s). · Send email and SMS notifications to respective users. · Search and view list of triggered events based on source, priority, event type, date/time, etc. · Acknowledge events – Change status, key-in more information · Escalate event records to the next level of users or share event records with other users through command control. · Allow manual respond to triggered events including activating external hardware and transmitting I/O commands. · Consolidated e-reports generation with archive video, images, text and other file attachments through command control
53	The VMS/ Command control system should provide interactive reporting interface with standard and user-defined custom reports and filtering options to:

S.No	Specifications
	· Retrieve audit trails - user activities, errors and system logs. · View list of hardware units and selected configuration options. · Storage usage report detailing the available and consumed storage for specific Recording Servers in the VMS
54	The system should have Inbuilt diagnostic utility that gathers several different functions of deployed hardware and software modules and attempts/assist to correct the problem in case of deviations from the established baselines occurs.
55	The facility should be there to extract & save the video footages / images on CD, DVD, USB, External Storage etc.
56	The system should continuously monitor the connectivity with camera even when not connected for live or recording. Upon any failures, system should raise as alarm.
57	Various video analytics that shall be offered on identified cameras are: - a) Loitering /Vandalism around area under observation b) Video Loss Alarm c) People Head Counting or Crowd Recognition d) Camera Tampering/Camera ON/OFF video alarms e) Image Masking- Privacy Protection Video Tracking of Person f) Video Tracking of Person/Object in field of view g) Left/Abandoned Item Detection and Removed Item Detection h) Virtual Fence/Perimeter Breach/ Entry —Exit in restricted zone i) Video summarization –The VMS shall summarize activities in any given segment of video based on already recorded files, so that activities that happened during a period of time can be viewed in reasonably short period of time (for example 1 hr video =summary in 10 minutes)

4) Server

S.No	Parameter	Specification
1	Processor	2 x Intel Xeon latest generation processors. 64-bit x86 processor fully binary compatible with 64/32-bit applications. Cores: 2 x 16-core (minimum) with a minimum clock rate of 2.4 GHz.
2	Memory	Minimum 64GB of the latest DDR4 memory using minimum 16GB DIMMs or higher. Advanced ECC with multi-bit error protection. The memory should have native capability of identifying and reporting the densities of the memory installed in the server.
3	HDD Controller	12 Gbps SAS/NVMe RAID controller supporting RAID 0, 1, 5, and 6 with a minimum of 2GB battery-backed cache.
4	HDD	4 x 1.92TB SSD hot-swappable or higher with RAID 5 configuration
5	Network Controller	Network controller: minimum 4 x 1Gbps ports and 2 x 10/25Gbps ports with 10Gbps transceivers.
6	Bays	Minimum 8 hot-swappable drive bays.
7	System Chassis	Rack mount, 2U (maximum), redundant hot-swappable power supply with platinum efficiency.
8	OS Certification	Certification for the latest server versions of Windows and Linux.
9	IDC Ranking	OEM should be ranked within the top 3 as per the IDC report for any one of the previous four quarters in India for servers.

S.No	Parameter	Specification
10	HBA card	To be supplied with 16GBPS FC HBA cards for connecting with SAN/Server Farm switch and storage box
11	Virtualization	Shall support Industry standard virtualization hypervisor like Hyper-V/ VMware.

5) L2 - 24 Port Switch

S. No.	L2 - 24 Port Switch General Specifications
1.1	**General Features:**
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.
1.1.2	Switch should support internal field replaceable unit redundant power supply.
1.1.3	Switch should have minimum 4 GB RAM and 4 GB Flash.
1.1.4	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 80 Gbps of stacking throughput and support 8 switches in single stack.
1.2	**Performance:**
1.2.1	Switch shall have minimum 128 Gbps of switching fabric and 95 Mpps of forwarding rate.
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.
1.2.3	Should support minimum 11K IPv4 routes or more
1.2.4	Switch shall have 1K or more multicast routes.
1.2.5	Switch should support atleast 16K flow entries
1.2.6	Switch should support 128 or more STP Instances.
1.2.7	Switch should have 6MB or more packet buffer.
1.3	**Functionality:**
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
1.3.3	Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+.
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbour Discovery Inspection and IPv6 Source Guard.
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.

1.3.9	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.
1.4	**Interfaces**
1.4.1	Switch shall have 24 nos of 10/100/1000 Base-T ports and additional 4 nos of SFP+ uplink ports.
1.4.2	All 24 ports should support PoE(802.3af) and PoE+(802.3at) with a power budget of 370W form day 1. It should be possible to supply 740 W by adding another power supply.
1.5	**Certification:**
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.
1.5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
1.5.4	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years.

6) L3 Core Switch

S. No.	Core Switch- L3
	General Specifications
1.1	**General Features:**
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.
1.1.2	Switch should support internal hot-swappable Redundant Power supply from day 1.
1.1.3	Switch should have redundant hot swappable fans.
1.1.4	Switch should have minimum 16 GB RAM and 16 GB Flash.
1.1.5	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 480 Gbps of stacking throughput with 8 switches in single stack.
1.2	**Performance:**
1.2.1	Switch shall have minimum 2000 Gbps of switching fabric and 1488 Mpps of forwarding rate.
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.
1.2.3	Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more
1.2.4	Switch shall have 8K or more multicast routes.
1.2.5	Switch should support at least 64K flow entries
1.2.6	Switch should support 128 or more STP Instances.
1.2.7	Switch should have 32MB or more packet buffer.
1.3	**Functionality:**
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s,

	802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
1.3.3	Should support advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP from day 1
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+.
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbour Discovery Inspection and IPv6 Source Guard.
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.
1.3.9	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.
1.3.10	Switch shall have modular OS to support application 3rd party application hosting
1.4	**Interface**
1.4.1	Switch shall have 24 nos. 1G/10G/25G fiberports and additional 2 nos 40/100 uplinks ports. The switch should be populated with 20 nos of 10G MM transceivers.
1.5	**Certification:**
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.
1.5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
1.5.4	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years before releasing this RFP.

7) 8 -Port Industrial Switch

S.No	Specifications
1	Switch Should Support 8 10/100BASE-T PoE, 2 SFP ports
2	switch should support Operating Temperature 0 to 60 °C
3	Switch Should Support Min. 20 Gbps Switching Capacity and Maximum 64 Byte, Packet Forwarding Rate is 14.88 MPPS, 8K MAC address table.
4	Switch Should Support IEEE 802.3af & at compliance (for PoE ports) and minimum 240W Power Budget.
5	Switch Should Support IGMP Snooping v1, v2 and MLD snooping v1/v2

6	Switch Should Support 4K VLAN ID's, Min 256 static VLAN
7	Switch Should Support Port Mirroring One to one/Many to One,
8	Switch should support Quality of Service (QoS), 802.1p, Strict, Weighted Round Robin (WRR), Bandwidth Control.
9	Switch Should Support IP interfaces, Static routing for inter-VLAN Communication

8) Distribution Switch

S. No.	Distribution Switch - 24 Port
	General Specifications
1.1	**General Features:**
1.1.1	Switch should be fixed form factor with full Enterprise Layer 3 image supporting IPv6 and BGP with the latest Firmware as available with Line rate non-blocking performance.
1.1.2	The switch should support Minimum 24 x 10Gbps SFP+ port and 2XQSFP28 port
1.1.3	400 Gbps HA bandwidth should be offered from Day 1
1.1.4	10G-LR optic –2 no per switch. Should be from Switch OEM., 1G SFP Optic 10 no. and 10Gig RJ45 optic - 10 no per switch. Should be from Switch OEM.
1.1.5	The switch should support HA options in Active - Active or Active Backup configuration as required, all supporting features and licenses to be provided to support the same.
1.1.6	The switches should be interconnected to offer line rate speed as desirable.
1.1.7	The switch should support relevant 1G/10G interfaces to connect.
1.2	**Performance:**
1.2.1	Minimum 1 Tbps backplane or more with non-blocking performance supported by tolly/Miercom or equivalent reports
1.2.2	Minimum 80K MAC addresses and ARP table
1.2.3	Switch should have 8GB RAM and 32MB packet buffer
1.2.4	4K 802.1Q vlans with 4K vlan ID support
1.3	**Networking Features**
1.3.1	Should support L3 routing in hardware for both IPv4 and IPv6 packets
1.3.2	Should support 64K route table capacity for IPv4 and IPv6 in hardware.
1.3.3	Should support Static Route, OSPF, BGP from Day one for both IPv4 and IPv6 considering all License, software, hardware upgrades required if any.
1.3.4	Should support 8 ports up to max 128 LAG groups, should be able to LAG across switches
1.3.5	Switch should support BGP-EVPN, VRF, VXLAN, PFC, ETS/equivalent DCBX, ECN etc.
1.3.6	MLD/MLD Snooping, IGMP Snooping v1/v2/v3, PIM technologies
1.4	**Security Features**
1.4.1	Should support all AAA functions with RADIUS and TACACS integration.
1.4.2	Should support various strom control functions.
1.4.3	Should support 802.1x implementation using RADIUS
1.4.4	Should support Ingress and Egress Acls

1.5	Management Function:
1.5.1	Should support encrypted communication between the user accessing the device namely using all access methods CLI, SSHv2, SSL, and SNMPv3 and Secure FTP/TFTP
1.5.2	Should support features like LLDP, LLDP-MED or equivalent
1.5.3	The Operating image should be modular in architecture with the industry standard CLI would be preferred along with SNMP and XML support.
1.5.4	XML/PERL/Python/API integration support should provide the ability to control IP addresses, configure both physical and logical interfaces, configure Access controls.
1.5.5	Should support sFlow or equivalent
1.5.6	Should support management function like Ping, Telnet, Tracert for both IPv4 and IPv6
1.6	Physical Parameter of switch
1.6.1	Switch should have minimum 8 GB RAM, 8 GB SSD/Flash and 8 MB packet buffer
1.6.2	AC 120/240 V (50/60 Hz)
1.6.3	The proposed switch should be offered FANs module and Power supply Redundancy.
1.6.4	Operating temperature: 32° to 104°F (0° to 40°C)
1.6.5	AC 120/240 V (50/60 Hz)
1.7	Compliant Standards:
1.7.1	Should be ROHS Compliant, IPv6 Ready for both Host and Router
1.7.2	UL/CSA 60950-1, Second Edition EN 60950-1, Second Edition. Switch or its operating system should haveEAL/NDcPP certified at the time of delivery of the Switch. OEM duly signed letter to be submit withthe bid for confirmation with dates.
1.7.3	EN 300 386, EN 55024, EN 61000-3-2, EN 61000-3-3 or equivalent standards.
1.7.4	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years.

9) Storage

S.No	Parameter	Specification
1	Form Factor	Rack 2U or higher
2	Controller	The proposed NAS should be configured with minimum dual active-active controller.
3	Processor	Intel® Xeon-Silver 4208 (2.1GHz/8-core/85W) Processor or better
4	Cache/Memory	NAS must be with minimum **128 GB** ECC RAM and upgrade up to 256 GB or higher.
5	Internal storage capacity	1. Support for SAS/SATAIII 3.5'' HDD or SSD. 2. Offered NAS solution must support at-least 60 bay 7.2K RPM HDD slot in RAID 5.
6	Front/Back-end ports	1. Minimum 2 x 1G Ethernet Ports. 2. Minimum 2 x 10G SFP+ Ports 3. Two or more USB 3.0 Ports.
7	RAID	Must Support for RAID Levels: 0, 1, 5, 6
8	Authentication Support	NAS must support Windows AD authentication.

S.No	Parameter	Specification
9	Network Client Type Support	Windows and Linux.
10	Management	Must support GUI.
11	Cables, Driver's connectors and accessories	Must come with require accessories, cable and connector from day one.
12	Power Supply	Dual Redundant Hot-Swappable Power Supplies

Other features in Storage

1. Complete storage system with appropriate accessories & fixtures for recording, storage of footages with a provision of retention for minimum 60 days.
2. Ensure ability of the system to view and record during day & night and also to captures the live video stream, store, retrieve and analyze video images with functional specifications specified in this document.
3. External NL-SAS storage with RAID 5 configuration.
4. Recording resolution FULL HD@ 30 FPS.
5. **Flagged data may be Approx 5 % of recorded data.** Flagged data can be retain for at least 120 days.

10) Firewall with IPS and IDS

S.No	Technical Specification
Interface and Connectivity Requirement	8 X 1G Copper/RJ45 Day 1
	8 X 10G SFP/SFP+ Day 1
	8 X 10G SFP+ module for future scalability.
Hardware Architecture	The appliance-based security platform should provide Next-Gen Firewall functionality like IPS, Application Control, URL filtering and Anti-malware functionality in a single appliance from day one.
	The appliance hardware should be a multicore CPU architecture and should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats. The appliance hardware should have a hardened operating system from the OEM and should support minimum of 64 GB of RAM to make sure all the security capabilities are provided without degradation form day one
	Proposed firewall should not consume more than 1RU of rack space to make sure sustainability goals of the organization.
	The firewall should have integrated redundant hot swappable fan tray and dual redundant power supply to remove any single point of failure in the solution
Performance & Scalability	The NGFW throughput of the firewall should be a minimum 10 Gbps with application identification and firewalling enabled with real world/enterprise/ production traffic. The IPS throughput should be 10 Gbps
	The firewall should provide 5 Gbps of IPSEC VPN throughput
	NGFW Firewall should support at least 1,500,000 Layer 7 Concurrent sessions
	NGFW Firewall should support at least 150,000 connections per second L3/L4 or New Layer 7 connections per second – Min 90,000
	High Availability Configurations shall support Active/ Passive or Active/Active- Clustering
Next Gen Firewall Features	Firewall should support creating security policies with source/destination zones, network subnets/ranges, geolocation objects, ports/protocols, applications, user/group attributes, URL/URL categories and action on traffic. The actions on the traffic should be to allow, alert, block, block and continue, reset. The firewall

S.No	Technical Specification
	should provide time based polices with options for recorrecting schedule or one time schedule.
	The firewall should support NAT's like source NAT, destination NAT, U-Turn NAT. Firewall should support Nat66, Nat 64 & Nat46 functionality, CGNAT
	Solution should provide capabilities like dynamic real-time metrics based, policy-based, application path selection across multiple WAN connections and supports service chaining for additional services such as WAN optimization and firewalls.
	The solution should provide the following routing capabilities: OSPF, EIGRP, BGP, RIP, Multicast, Static,
	Route Tracking(SLA) PBR, ISIS, BFD, ECMP, VRF, Application based Routing
	Should support capability to create multiple virtual context/instances with strict hardware resource (CPU, Memory & Storage) reservation and ensure traffic isolation between virtual context/instance
	The solution should be able to provide contextual information about the hosts and the network subnets present such that the admins are able to capture all the required information and build the security profiles based on the details shown on the solution. The details captured should consist of the following: IOC's, MAC addresses, IP address, Applications, Ports and protocols, vulnerabilities etc.
	Should support capability to integrate with other security solutions to receive contextual information like security group tags/names.
	Should support more than 5000+ (excluding custom application signatures) distinct application signature as application detection mechanism to optimize security effectiveness and should be able to create 40 or more application categories for operational efficiency
	Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.
	Should support more than 30,000 (excluding custom signatures) IPS signatures or more. Solution should be able to passively detect endpoints and infrastructure for threat correlation and Indicators of Compromise (IoC) intelligence. The signatures should also have categorization based on MITRE TTP's.
	The firewall solution should have the following capabilities to make sure the current solution is future ready for technologies like WAN routing, SASE etc. The firewall should have application aware routing with HTTP and ICMP ping , ZTNA based clientless access to applications.
	The firewall solution should have capabilities like Application Aware Routing, Health Monitoring, DIA,Dual ISP, Data interface Management for simplified branch capabilities
	Should be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports.
	The solution should be able to identify, decrypt and evaluate both inbound and outbound SSL traffic on-box. The NGFW shall support the ability to have a SSL inspection policy differentiate between personal SSL connections i.e. banking, shopping, health and non-personal traffic.
	The solution should have ML/AI capability to detect client apps and process. Moreover, it should be able identify malicious encrypted traffic even when it is destined for a trustworthy service. This is required to help administrators control specific applications and improve network security
	The solution should provide traffic hit count, Rule Conflict Detection (Redundant &
	Shadowed) and policy warning for streamlining firewall policies.

S.No	Technical Specification
	The solution should provide Change Management capability for the organizations needs to implement more formal processes for configuration changes, including audit tracking and official approval before changes are deployed.
	Should support the capability to quarantine end point by integrating with other security solution like Network Admission Control.
	The solution must provide IP reputation feed that comprised of several regularly updated collections of poor reparation of IP addresses determined by the proposed security vendor. Solution must support IP reputation intelligence feeds from third party and custom lists of IP addresses including a global blacklist. The solution should have the capability to detect MD5, SHA256 and SHA512 traffic hashes to detect any malicious traffic pattern
	The solution should provide Configuration Deployment History, Pending Changes and Policy Compare capability before the security policies are deployed on the firewall. It should also provide configuration rollback capacity to the last good configuration running on the firewall.
	Should must support DNS threat intelligence feeds to protect against threats
	The Appliance OEM must have its own threat intelligence analysis center and should use the global footprint of security deployments for more comprehensive network protection.
	The detection engine should support capability of detecting and preventing a wide variety of threats (e.g., network probes/reconnaissance, VoIP attacks, buffer overflows, P2P attacks, etc.).
	Should be able to identify attacks based on Geo-location and define policy to block on the basis of Geo-location
	The detection engine must incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioural anomaly detection techniques.
	Should support Open based Application ID / Custom Application ID for access to community resources and ability to easily customize security to address new and specific threats and applications quickly
URL Filtering Features	Should must support URL threat intelligence feeds to protect against threats
	Should support Reputation- and category-based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies on more than 250 million of URLs in more than 75+ categories.
	Should support safe search for YouTube EDU enforcement
Anti-APT / Malware Features	Should support the capability of providing network-based detection of malware by checking the disposition of unknown files using SHA-256 file-hash or signature (update to be provided in 300 seconds) as they transit the network and capability to do dynamic analysis.
	Solution shall have capability to analyse and block TCP/UDP protocol to identify attacks and malware communications. At minimum, the following protocols are supported for real-time inspection, blocking and control of download files: HTTP, SMTP, POP3, IMAP, NetBIOS-SSN and FTP
	Proposed solution shall have required subscription like Threat Intelligence for proper functioning
Management	The management platform must be accessible via a web-based interface and ideally with no need for additional client software and must provide centralized logging and reporting functionality
	The management platform must be a dedicated OEM appliance and VM running on server will not be accepted

S.No	Technical Specification
	The management appliance should have 2 x 10G port and integrated redundant power supply from day one
	The management platform must be capable of integrating third party vulnerability information into threat policy adjustment routines and automated tuning workflows
	The management platform must be capable of role-based administration, enabling different sets of views and configuration capabilities for different administrators subsequent to their authentication.
	Should support troubleshooting techniques like Packet tracer and capture
	The management platform must provide multiple report output types or formats, such as PDF, HTML, and CSV. The management platform support running on-demand and scheduled reports
	The management platform must support multiple mechanisms for issuing alerts (e.g., SNMP, e-mail, SYSLOG).
	The centralized management platform must not have any limit in terms of handling logs per day
	The management platform must provide built-in robust reporting capabilities, including a selection of pre-defined reports and the ability for complete customization and generation of new reports.
	The management platform must risk reports like advanced malware, attacks and network
	The management platform must include an integration mechanism, preferably in the form of open APIs and/or standard interfaces, to enable events and log data to be shared with external network and security management applications, such as Security Information and Event Managers (SIEMs), and log management tools.
	Proposed solution should support 24x7x365 OEM TAC support and advance Next Business Day Hardware replacement

11) Junction Box

S.No	Parameter	Specification
1	Size	Suitable size as per site requirements to house the field equipment.
2	Cabinet Material	GI with powder coated (Antirust coating)
3	Material Thickness	Min 1.2 mm
4	Number of Locks	Three Point Lock
5	Protection	IP 56, Junction Box design should ensure to keep the temperature within suitable operating range for equipment's and should also avoid intentional water splash and dust intake. With built-in redundant fan and filter assembly inherent in the design. Junction Box design should ensure to keep the Operating temperature range of 10° C to 50° C.
6	Mounting	To be mounted on a Base stand made up of powder coated MS Angle Profile with minimum height of 600 MM and should be covered from all sides with GI/MS powder coated sheet of minimum 1.2 MM thickness. The height of the stand to be selected based on the surface gradient to ensure that in case of water logging the logged water should not enter the JB.
7	Cabling	All cabling to be brought from the bottom through double compression glands to ensure that the IP rating is not

S.No	Parameter	Specification
		compromised.
8	Form Factor	Rack Mount/DIN Rail
9	Other Features	Rain Canopy, Cable entry with glands, proper earthing and Fans/any other accessories as required for operation of equipment's within junction box.
10	Additional	Pocket to keep papers/file on inner side of the door LED light with limit switch to switch on the light once door is open. Additionally, a power off switch also to be available on the LED light.

12) Surge Protection Device
A- Network SPD

S.No	Parameter	Min. Specification
1	Connection Type	Series connection
2	Application Type	10/100/1000 Mbps LAN
3	Transmission Speed	1 Gbps
4	Application	Secondary 8 wire category 6
5	Connector	RJ 45
6	Nominal Surge Current	Core to Core: 350 A (8/20 µs) Core to Ground: 2 KA (8/20 µs)
7	Pulse discharge current	1 kA
8	Maximum Continuous operating voltage	± 5 V DC (± 57 V DC / PoE+)
9	Enclosure	IP20
10	Temperature (Ambient)	-10°C to 55 °C or above
11	Voltage Protection level	Core – core ≤ 20 V Core – Earth ≤ 700 V
12	SPD Compliance	IEC 61643-21 or equivalent BIS
13	Approvals	CU, UL Listed or equivalent BIS

B- Power SPD

S.No	Parameter	Specification
1	IEC test Classification	II / T2 or BIS Equivalent
2	Technology	L-N: MOV Technology & N-PE: GDT Technology
3	Pluggability	Pluggable for Safe and Easy Maintenance and have provision of testing respective plugs for preventive periodic health monitoring.
4	Nominal Voltage Un	240 / 415 V AC (TN-S / TT)
5	Maximum Continuous Operating Voltage	335 V AC
6	Nominal Discharge Current	20 kA
7	Maximum Discharge Current	40 kA
8	Short Circuit Current rating ISCCR	25 kA
9	Voltage Protection Level Up (L-N)	≤ 1.5 kV
10	Temporary Over Voltage UT (L-N)	415 V AC (5s / Withstand Mode) or better
11	Temporary Over Voltage UT	1200 V AC (200ms / Withstand Mode) or better

	(N-PE)	
12	Response time	L-N: ≤25ns N-PE: ≤100ns
13	Mounting	DIN Rail

13) Outdoor armored rated cat 6 cable

1	Cat.6, UTP, 23 AWG Double jacket. Aluminum Armoured, Anti Rodent, Anti Termite, Installation cable.
2	Cable outer jacket material LSZH with Anti Rodent and Anti Termite
3	Cable inner jacket material LSZH
4	Armoring Aluminum Armoured wire
5	Armoring: ECCS Tape (Thickness > 0.125 mm)
6	Operating Temperature -20° C to +70° C
7	Cable overall diameter nominal value Ø 9.2 ± 0.3 mm
8	CONDUCTOR RESISTANCE (DC): ≤ 93.5 OHMS/1000MTR@20Degree C. MAX.
9	IMPEDANCE: 100±15%OHMS
10	DELAY SKEW: 45ns/100m
11	Generally confirming to EIA/TIA 568-C and IEC/ISO 11801, IEC 60331-1

14) Indoor double jacket cat 6 cable

S.No	Specification
1	4 Pair Cable with integral cross -member pair separator for uniform characteristic impedance.
2	Category 6 Unshielded Twisted 4 Pair 100 Ω cable shall be compliant with ANSI/ TIA/ EIA-568-C.2- 1/ ROHS Additional ISO/ IEC 11801 2ndEd. Transmission Performance Specification for 4 Pair 100Ω, Category 6 Cabling
3	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, UTP cable jacket.
4	Conductor: Solid Copper
5	Conductor Diameter: 0.574, ± 0.01mm (23AWG)
6	Inner Jacket: LSZH/ PE/ PVC
7	Outer Jacket: PE –Black, Anti-Rodent, LSZH/ PE/ PVC
8	Max Temperature: -10°C to +60°C
9	Mechanical Test
10	Should have Pulling force more than 10 Kg.
11	Electrical Test
12	Conductor Resistance: <9.38Ω /100m
13	Resistance Unbalance 5% Max
14	Mutual Capacitance: < 5.6nF/100m
15	Capacitance Unbalance: 330pF/100m.
16	Characteristic Impedance: 100 +15 Ω conductor

15) Optical fiber cable

1	Cable type Multi Loose Tube and Fiber class G.652.D (OS2)
2	Fiber count 6/12/24 Fiber as per requirement
3	Outer Sheath UV stabilized LSZH ,Black
4	Number of Fiber per Tube 6F
5	Metallic Armoring Corrugated ECCS Tape

6	Cable overall diameter 11 - 14 mm
7	Central Strength Member FRP(Fiber reinforce plastic)
8	Peripheral strength member High Strength Aramid Yarn
9	Cable should be Gel Free with Water Blocking Tape & water swellable yarns
10	Number of Rip Cords Below Tube 2.Nos
11	Tuber color sequence Blue, Orange, Filler, Filler, Filler.
12	Fiber Color Sequence Blue, Orange, Green, Brown, Slate and white.
13	Tensile Strength 1900N
14	Crush Resistance 1000N
15	Temperature Operation - 30 ºC to + 70 ºC

16) Online UPS (2 hr backup) for cameras

S.No	Parameter	Specifications
1	Capacity	1 KVA, 800 Watt (1Øinput/ 1Ø output)
2	Topology	True Online Double Conversion UPS Standalone UPS with single battery bank
3	Technology	Microprocessor based, PWM with IGBT based, Phase neutral reversal protection
	INPUT	
4	Input Facility	1Ø, 2-wire & Ground, (Phase &Neutral + Ground)
5	Input Voltage Range	160~280 VAC (On 100% Load), 120~290 VAC (On 50% Load),
6	Input Frequency Range	45~55Hz, Autosensing
7	Input Power Factor	≥0.99
8	THDI	≤10%
	OUTPUT	
9	Power Factor	0.8
10	Nominal Output Voltage	220/230VAC
11	Voltage regulation	± 1% static, ± 5% for Dynamic Load
12	Nominal Frequency	50Hz
13	Waveform	Sine wave
14	Crest factor	3:1
15	Total harmonic distortion (THDY)	< 3% (linear load); <5% (nonlinear load)
16	Output Short Circuit Protection	Electronic, trip
17	Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: < 4ms
18	Maintenance/Manual Bypass	Automatic & Manual
19	DC Ripple factor	≤1%
20	Efficiency	Overall (Ac to AC): > 92%
21		Upto 100% infinite
22	Inverter overload capability	>100% ~ 110%: for 60 Secs;
23		>110% ~ 130%: for 10 Secs;
24		> 130%: upto 1 seconds
25	Protections	Battery low voltage, Overload, Short Circuit & Over temperature, Input under and over voltage, DC Bus High & Low voltage, Fan failure
26	SNMP- Monitoring Software for monitoring	Communication interface

S.No	Parameter	Specifications
BATTERY & BATTERY BANK CHARGER		
25	DC BUS voltage	36 VDC
26	Batteries Type	Sealed Maintenance Free, 12 V
27	Battery Make	Exide/Quanta
28	Battery Back up	2 hour on full load
29	Number of Battery Banks	One or Two maximum
30	Required VAH	1512
31	Minimum Charger Rating	The Charger should be able to deliver charging current (minimum) equivalent to 10% of Battery AH rating offered.
32	Battery re-charge time (After complete discharge) to 90% capacity	8-10 Hours
33	Cold Start	should be provided
Environmental		
34	Operating Temperature	0-50 degree C
35	Type of Cooling	Forced Air

17) Online UPS (2 hr backup) for control room (N+1)

Parameters	Specification
UPS Capacity	10 KVA (Single Phase Input-Single Phase Output)
Load Power Factor	0.8
Bypass Parameters	Configurable
Separate Bypass	Not Available
Display	ICON LCD + LED Display
Temperature Compensated Charger	Available
Fan Speed Control	Yes
Controller	Digital Signal Processor
Input Characteristics	
Phase / Voltage	1 Phase / 230V
Voltage	160V AC / 185V AC ± 5Vac
Low loss / Come back at 80 - 100% load	160V AC / 185V AC ± 5Vac
Low loss / Come back at 70 - 80 % load	140V AC / 155V AC ± 5Vac
Low loss / Come back at 60 - 70 % load	120V AC / 135V AC ± 5Vac
Low loss/ Come back at 0 - 60 % load	110V AC / 125V AC ± 5Vac
High loss/ Come back	300V AC / 290V AC ± 5Vac
Power Factor	0.99
Output Characteristics	
Voltage	220VAC / 230VAC / 240VAC ± 1%
THDv	<3% Linear Load
	<5% Non-Linear Load
AC / AC Efficiency (Inverter) @ rated load	upto 92%
Overload Capacity	105 - 110%: 3 min
	111 - 130%: 30 sec
Operating Temperature	0 - 40 deg C (with full Load)

Parameters	Specification
Protections	Battery low voltage, Overload, Short Circuit & Over temperature, Input under and over voltage, DC Bus High & Low voltage, Fan failure
Communication interface	SNMP- Monitoring Software for monitoring
Battery	
Battery Backup	2 Hrs
RS 232	Yes
USB Com Port	Yes
Ingress Protection	IP 20
EMC	EN 62040-2
Safety	EN 62040-1
Certification	CE Certified,

18) Video Wall (70"*4) with controller

S. No.	Specifications	Technical Parameter
1	Bezel Gap (screen to screen)	1.75 mm or lower
2	Panel Depth	less than 71 mm
3	Screen Type	LED Backlit LCD
4	Screen Size (Inches)	70
5	Resolution (Pixels)	1920 x1080
6	Category	Video wall Panel
7	Typical Brightness	500 or better
9	Operation Hours	24 x 7
10	Haze % (for lesser reflection of room light)	28% or more
11	Power Consumption Typical (Watts/ hr)	135 or lower
12	Ports & Connectivity	
13	Number of HDMI Ports	2
14	Number of Ethernet Ports	1
15	Display Port	Yes
16	Output Port	DP 1.2 (1)
17	Accessories	Remote Control, Batteries, User Manual, Power Cable
18	Certification	BIS Registration
19	BIS Registration as per CRS of MeitY	Yes
20	Safety & EMC Certificate	CE,FCC,UL, IP5X, ADA Compliant
21	Operating Temperature (Degree C)	0-40'C
22	Operating Humidity (%RH)	10--80
23	Product Life (Hrs)	60000 hrs MTBF

19) LED TV

S.No	Features	Specification
1	Display Size	55 inch or above
2	Native Resolution	3840 x 2160 (UHD) 4k or better
3	Brightness	Minimum 300 cd/m2 or above
4	Contrast Ratio (Native)	Minimum 1100:1 or better
5	Viewing Angle	178 * 178
6	Refresh Rate	60 Hz and above
7	Input Ports	HDMI-2, USB 2.0, RJ45-1
8	Output Ports	Digital audio out/ Headphone out
9	Wi-Fi	Built-in Wifi required
10	Audio	20W (10W * 2)
11	Certificates	UL/CE/CB & BIS, RoHS
12	Accessories	Wall mount, Table stand, Remote and standard cables with complete Installation
13	OEM Warranty	3 Years
14	Operating System in case of smart TV	Web OS/ Andriod / Tizen
15	OEM Manufacturing date	OEM Manufacturing 2023 or later

20) Desktop

S.No	Parameter	Specification
1	Processor Make	Intel
2	Processor Generation	Intel Core i9, 10th Generation or higher
3	Number of Cores	8 or above
4	Cache (MB)	16 or above
5	Processor base Frequency (GHz)	2.90 GHz or above
6	Motherboard	Intel / OEM
7	Type of RAM	DDR4 or better
8	RAM Size (GB)	64 GB or above
9	RAM Speed (MHz)	DDR4-2666 or better
10	RAM Expandability up to	256 GB or above
11	Type of Hard Disk Drive	HDD / SSD or Both
12	Capacity of HDD (GB)	(a) 512 SSD/1000 SSD or (b) 512 SSD + 1TB HDD
13	Graphics card	8 GB or higher
13	Operating System (Factory Pre-Loaded)	Windows 11 Professional 64 bit or latest
14	Input Devices	Standard USB Keyboard - Wired
15	Mouse	Optical USB Mouse - Wired
16	Ports	Four or more
17	HDMI / VGA or both	Yes
18	Other	Microphone, Stereo headphone and other standard port
19	Networking	Dual Ethernet - Yes - 10/100/1000
20	Display	Diagonal Viewing Size (Inch) - 22 Inches or above.
21	Resolution	1920 x 1080 FHD or above
22	Input Devices	Standard USB Keyboard
23	Mouse	Optical USB Mouse
24	Anti-Virus	To be included with 5 years licence
26	BEE / Energy Star for the given	Yes

	Model	
27	Certifications	(FCC/CE/CB), BIS and RoHS
28	MS Office	Factory preloaded MS Office 2021 (Home and business life time)
29	Warranty	On Site OEM Warranty (Year) - 5 Years comprehensive warranty

21)Laptop

S/N	Specifications	Features
1	Operating system	**Windows 11 Pro, 64 bit (Licensed version) or latest** with MS Office 2021
2	Processor	**12th Gen Intel Core i7, Min. 12mb Cache or latest.**
3	Memory	Min. 16 GB DDR4 or better
4	Hard drive	1x500 GB SSD
5	Display	**15.6" inch or better**
6	Graphics Card	2 GB or better
7	Ports	**2 USB 3.0 Ports or better , 1 HDMI, 1Eth, 1 headphone/microphone**
8	Inbuilt Webcam	Yes
9	CD/DVD Drive	Optional
10	Accessories	Power cord, Back pack
11	Battery Back up	Min. 4 hours
12	Connectivity Features	Wi-Fi 802.11ac, Bluetooth
13	Warranty	3 years onsite from OEM or better.

22) Poles
A-CCTV Pole

S.No	Specification
1	Mounting structure: Use minimum 5Mtr. High Cylindrical GI Pole (Class B) or suitable structure with 4.5 Mtr. Minimum vertical clearance under the CCTV Camera from the Road surface.
2	The mounting shall be capable of withstanding roadside vibrations at site of installation.
3	It shall be provided with suitable walkway for maintenance access.
4	The side interior and rear of enclosures are provided in maintenance free finish. All enclosure is flat and wipe clean.
5	For Structural safety, structural safety certificate shall be provided from qualified structural engineers.
6	Wind Load: WL9 as per EN12966 to withstand high wind speeds and its own load - HT Steel Conforming to grade S355
7	Pole Base plate - Fe 410 Conforming to IS 226/IS 2062
8	Foundation Bolt- EN 8 grade or better
9	Pole shall be hot dip galvanized as per IS 2629/IS2633/IS 4759 provided with average coating thickness of 80 Micron or higher. The galvanizing shall be done in single dipping.
10	The pole shall be installed cast in- SITU RCC foundation on studs with nuts & washers and with adequate number of foundation bolts for greater rigidity basis the soil bearing test report of the actual site.

B-ANPR Pole

S.No	Specification
1	The Conical/Polygonal pole and cantilever arm of 2 Meter should be designed to with stand maximum wind speed as per IS: 857 (Minimum 50 m/Sec). Certificate for the structural integrity of the pole shall be submitted to justify the pole dimensions.
2	Pole shaft and cantilever have conical/polygonal cross section and shall be preferably continuously tapered with single longitudinal welding.
3	Pole shaft shall be provided with a grade flange plate of suitable thickness with provision of fixing suitable no. of foundation bolts. This base plate shall be filleted welded to the pole shaft at two locations i.e., from inside & outside.
4	Conical/ Polygonal pole shall have approximately 500 MM door opening length at the elevation of 500 mm from base plate. The door shall be vandal resistant and shall be weatherproof to ensuresafety of electrical connections inside the pole. The door shall be flush fit with locking facility. The pole shall be additionally reinforced with welded steel section, so that the section at door is unaffected and undue bucking of the cut section is prevented.
5	Material of construction shall be:
A	Conical/ Polygonal pole shaft - HT Steel Conforming to grade S355 with minimum plate thickness of 3 MM
B	Conical/Polygonal cantilever arm shaft - HT Steel Conforming to grade S355 with minimum plate thickness of 2.5 MM
C	Pole base plate - Fe 410 Conforming to IS 226/IS 2062 with minimum thickness of 16 MM
D	Pole foundation Bolt- EN 8 grade, GI
6	Pole shall be hot dip galvanized as per IS 2629/IS2633/IS 4759 slandered with average coating thickness of 86 Micron. The galvanizing shall be done in single dipping.
7	The pole shall be installed on a precast or cast in- SITU RCC foundation on studs with nuts & washers and with a set of four foundation bolt for greater rigidity basis the soil bearing test report of the actual site.

23) Smart network rack

S. No	Description of Requirements
1	Scope of Work
a.	This specification covers intelligent integrated/inbuilt infrastructure, standalone system design, engineering, manufacture, assembly, testing at manufacturer's works, supply, delivery at site, unloading, handling, proper storage at site, erection, testing and commissioning at site of complete infrastructure for the proposed Data Centre as detailed in the specification, complete with all accessories required for efficient and trouble-free operations
b.	Modular and scalable design for power and cooling: All the critical components used to design the system should be redundant and in the Events of failure the components can be maintained easily. All the components of the infrastructure should be such that it can be easily dismantled and relocated to different location.
2	Requirements
a.	Integrated Smart Rack Infrastructure Solution with Prefabricated rack frame with Cold and Hot aisle containment of 03 racks should cater IT load of minimum 35 kVA. Both Hot & Cold aisle containment should be part of the rack frame.

b.	The Intelligent Integrated Infrastructure essentially includes internal redundant or backup power supplies, environmental controls (e.g., precision air conditioning, fire suppression, smoke detection, water leak detection, humidity sensor, intelligent monitoring system, security devices, etc.) Air-conditioning system is to have 100 % reliability on 24 x 7 basis with adequate standby for system redundancy. (Failure of any single unit; still to meet the total cooling requirement).
3	**Solution shall have following components: -**
3.1	**In-Row closed loop Air-Conditioning**
3.1.1	Precision Air Cooling solution should be of 35kW capacity with standby (N+N Redundancy)
	Precision Air Conditioner should have following Features:
a.	Cooling System should be DX (Variable capacity Digital Scroll) type.
b.	The compressor should achieve the required capacity by varying the time of loaded & unloaded state of the scroll elements inside the compressor.
c.	Inbuilt Heater and Humidifier to cater IT load up to 35kVA
d.	Outdoor Unit with fan speed control
e.	Microprocessor based Controller with capacity of minimum 400 event logs
f.	Each Unit should support at least 50 mtr copper piping distance (from indoor to outdoor unit)
3.2	**UPS System**
3.2.1	UPS should be of 40 kVA in N+ N redundancy, 4U, rack mountable with pf up to 0.9 and efficiency up to 94.9%. Other features of UPS system are as follows:
a.	True On-line UPS with Widest input range (305V-477V)
b.	Double conversion and IGBT technology: Full IGBT Rectifier /Battery Charger and IGBT based Inverter
c.	Facility for remote monitoring
d.	N+N redundancy should be provided.
e.	Battery backup of 60 min per UPS at rated capacity via 12 V VRLA/SMF Batteries.
3.3	**Power Distribution**
a.	Vertical Mounted Intelligent Rack PDU with 24 nos. of IEC C13 Sockets & 6 nos of IEC C19 Socket, 3 phase, 32A MCB. (Each rack having two PDU's)
3.4	**Electrical Power Distribution**
a.	DB panel should be mounted on to utility rack with all internal cabling integrated into the same. Essential MCB/MCCB should be provided with electrical system. All the PDUs inside all racks should be connected by the UPS. DB panel mounted on Utility rack shall be covered with Novec 1230 Gas based fire suppression system.
3.5	**Fire Safety, Security & Access Control**
a.	Fire detection and suppression system should be mounted in panel adjacent to Smart Racks to avoid consumption of any usable U space. It should have Fire alarm and fire suppression unit and the fire suppression agent should be NOVEC 1230 Gas as per NFPA guidelines.
b.	IP based Biometric Access Control System shall be provided to serve the objective of allowing access to authorized personnel only. The front & rear rack doors will be provided with magnetic locks and will operate on fail-safe principle through one common Biometric access control system.
c.	The Integrated Smart Rack Data Centre Infrastructure should be covered with Rodent repellent system
d.	IP Based CCTV camera to be provided for live monitoring at Integrated Smart Rack Data

	Centre Infrastructure.	
3.6	**Environmental Controls**	
3.6.1	Intelligent Integrated rack should include basic environmental controls:	
a.	Smoke Detector	
b.	Water Leak Detection system	
c.	Temperature & Humidity Sensor with 6 Temp. sampling point per rack	
d.	Door Sensor	
e.	Alarm beacon	
3.7	**Rack frame and U Space**	
a.	1 Nos. of 42 U racks of dimension 600 mm x 1000 mm (Server Rack) with integrated hot & cold aisle containment of minimum 300 mm each. Both Hot & Cold aisle containment should be part of the rack frame. Solution should have Min 42 U (total) space available for IT and network equipment. (UPS internal & Battery External).	
b.	Status based LED light to be provided on each rack.	
c.	Each rack enclosure should be physically separated through caged partition at cold & hot aisle to avoid unauthorized access from one rack to another.	
3.8	**Monitoring**	
a.	Detailed Monitoring & Diagnostics thru Rack Data Unit ,1U rack mountable, with redundant power supplies & capable of single window monitoring of all the environmental parameters through a single window dashboard over ethernet & Capable for sending Email Alerts. **UPS, air conditioning & rack PDUs should be integrated & monitored in a single dashboard with the rack monitoring unit.**	
b.	9inch touch screen HMI – Graphical User Interface display should be mounted on the Integrated smart rack solution for local monitoring & capable of monitoring real time PUE of the Integrated smart rack Data Centre	
3.9	**Other features & Credentials for Intelligent integrated Smart Rack DR solution:**	
a.	The Intelligent integrated Smart Rack DR should have both Cold aisle & hot aisle containment, of minimum 300 mm each which should be part of the rack frame for adequate airflow.	
b.	Critical Component's for Integrated Smart Rack DR solution i.e., Rack, rack PDU, Cooling, UPS and monitoring system along temperature & humidity sensors, should be from same & single OEM for Seamless Integration & better Service Supports	
e.	OEM or Manufacturer should be ISO 9001: 2000, ISO 14001, ISO/IEC 27001:2013 and ISO 45001 certified.	
f.	OEM shall be present in Gartner Competitive Landscape Research Report for Edge in the Micro Modular Data Centre Market as Leader in Data Centre Facilities Specialist.	
g.	OEM for UPS & Precision air conditioning units must have its own manufacturing facility in India. Supporting document/undertaking regarding the same to be submitted along with the bid.	
h.	OEM or Manufacturer of the offered goods/ equipment's should be a company registered under the companies Act since last 10 years. Valid company registration certificate should be submitted	

24) Air Conditioner

S.No	Parameter	Specification
1	Compressor	Rotary or better
2	Dehumidification	Yes

S.No.		
3	Remote Control	Yes
4	Indoor Temperature Indicator	Yes
5	Turbo Mode or equivalent	Yes
6	Auto Air Swing	Yes
7	Active Carbon Filter	Yes
8	Sleep Mode	Yes
9	Capacity	2 Ton
10	BEE Rating	5 star
11	AC Type	Split
12	Binding Type	Copper
13	Warranty	5 years or more

25) Router

S.No.	General Specifications
1	**General Requirement**
1.1	The Router should support chassis or fixed form-factor, multi-core Processor, internal redundant field replaceable power supply (from Day1). The Router Should have capabilities of seamless field upgrade/replacement (without interrupting running processes and services).
1.2	Router should have a physical separation between control and data planes processor. Router should support inline hardware accelerated encryption for high-throughput IPsec.
2	**Hardware and Interface Requirement**
2.1	Router should have minimum 12 x 10G LAN / WAN Interfaces. It should support 1G/10G optics and should be populated as per design.
2.4	Router should have minimum 16 GB of on-board/inbuilt DRAM/RAM for data plane + control plane processes and 32 GB storage from Day 1.
3	**Performance Requirement**
3.2	Router should support minimum 4M IPv4 & IPv6 routes
3.3	No. of Firewall session: 6M
3.4	The router must support IKEv1, L2TP, IKEv2, GRE and IPSEC from day 1. The proposed solution should serve the GRE encryption for traffic from any location to other location on demand and also should able to create GRE tunnel.
3.5	Bidder should ensure necessary encryption throughput (IMIX, EMIX) of 80 Gbps supported by proposed device at site from day 1
3.6	Router should be scalable to support up to 4000 IPSEC tunnels.
3.7	Router should support VRF level segmentation with min support for 8000 VRF segments
3.8	Router should support IGMP v1/v2/v3 and PIM multicast routing
4	**Layer3 Features & Security**
4.1	Router should support static Routes, OSPFv2, OSPFv3, BGP4, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunnelling from Day 1
4.2	The Router should support Zone Based Firewall feature or an external appliance for the same functionality can be provided.
4.3	Router should Support Traffic Optimization feature built in the router operating system or an external appliance for the same functionality can be provided.
4.4	Shall have 802.1p class of service and marking, classification, policing and shaping.
4.5	Should support advanced encryption algorithms like AES-256 and AES-GCM .

4.6	The router should be able to support Hierarchical QoS. QoS should be supported both at Physical and sub-interface level
4.7	Router should be able to do deep packet inspection and identify applications at layer-7 and we should be able to define QoS and access control based on application.
5	**Manageability**
5.1	Router should support SSHv2, SNMPv2c, SNMPv3 and NTP
5.2	Routers should support AAA using RADIUS and TACACS+
5.3	Should have extensive support for IP SLA or equivalent and best path selection for metrics like delay, latency, jitter, packet loss to assure business-critical IP applications from Day1.
5.4	Router should support monitoring of network traffic with application-level insight with deep packet visibility into web traffic, RTP-Based VoIP traffic.
5.6	Router shall have capability to add on demand IPSec VPN tunnels dynamically established multipoint-to-multipoint IPSEC based spoke-to-spoke VPN tunnels matching traffic conditions
6	**Certification**
6.1	Router shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
6.2	Router shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.
6.3	Router/Router's Operating System should be tested and certified for EAL 3/NDPP or above under Common Criteria Certification
6.4	Router should be IPv6 Certified/IPv6 logo ready

26) Network monitoring system (NMS)

S. No.	
1	For effective operations and management of IT Operations, there is a need for an industry-standard Network Monitoring System (NMS). Given the expanse and scope of the project, NMS becomes very critical for IT Operations and SLA Measurement. Some of the critical aspects that need to be considered for operations of IT setup of are: Network Monitoring, unified Dashboard & Reporting and HelpDesk System.
2	The Monitoring Solution should provide Unified Architectural design offering seamless common functions including but not limited to: Event and Alarm management, Auto-discovery of the Network environment, Correlation, and root cause analysis, Reporting and analytics
3	The solution must provide discovery & inventory of heterogeneous physical network devices like Layer-2 & Layer-3 switches, Routers and other IP devices and do mapping of LAN connectivity with granular visibility up to individual ports level.
4	The operator should be able to build correlation rules in a simple GUI based environment where the Operator should be able to correlate cross domain events
5	The solution shall provide future scalability of the whole system without major architectural changes.
6	The proposed solution must not use any third-party database (including RDBMS and open source) to store data to provide full flexibility and control on collected data.
7	All the required modules should be from same OEM and should be tightly integrated for single pane of glass view of enterprise monitoring
8	The platform must provide complete cross-domain visibility of IT infrastructure issues
9	The solution must support custom dashboards for different role users such as Management, admin, and report users

10	The solution must support custom query-based widget with multiple visualization methods including Chart, Gauge, Grid, Top N list etc. to visualize and represent collected data with ease.
11	The solution should provide superior view of infrastructure health across system, networks, application and other IT Infrastructure components into a consolidated, central console
12	The solution must provide agentless and agent-based method for managing the nodes and have the capability of storing events / data locally if communication to the management server is not possible due to some problem. This capability will help to avoid losing critical events.
13	The proposed solution must provide agentless as well as agent-based monitoring for server infrastructure. The agents should be to set polling interval as low as 1 second with low overhead on target server infrastructure
14	The proposed solution platform shall provide a single integrated solution for comprehensive monitoring of the wired, wireless access, security access control devices, CCTV cameras or any pingable devices and rich visibility into connectivity and performance assurance issues.
15	The proposed solution must provide comprehensive and integrated management of IT infrastructure components to maximize the availability of IT services and SLA performance.
16	The design functionality shall facilitate creation of templates used for monitoring key network resources, devices, and attributes. Default templates and best practice designs are provided for quick out-of-the- box implementation automating the work required to use OEM validated designs and best practices.
17	The proposed solution must provide Health Monitoring reports of the network with settable periodicity -@24 Hrs, 1 week, 1 month.
18	The proposed solution must provide the graphical layout of the network element with modules drawn using different colors to indicate their status
19	The proposed solution should have multiple alerting feature to get the notification via email, sms and third-party systems
20	The Platform must include an event correlation automatically fed with events originating from managed elements, monitoring tools or data sources external to the platform. This correlation must perform event filtering, event suppression, event aggregation and event annotation
21	The proposed solution should provide alert console with alert summary such as no. of correlated alert, network alert, server alert, virtualization alert, cloud alert, application alert etc.
22	The system must have provision to overlay alert on reported metric to understand alert triggering behaviour across multiple drill down pages
23	The proposed solution must support log collection for Directories (i.e. AD, LDAP), hosted applications such as database, web server, file integrity logs etc. using agents
24	The proposed helpdesk system shall provide flexibility of logging, viewing, updating and closing incident manually via web interface
25	The proposed solution should be aligned with ITIL framework principles and certified with ITIL4 with minimum 7 practices like Monitoring and Event Management, Incident Management, Service Request Management, Problem Management, Change Enablement, Release Management and Knowledge Management. (a documentary proof of the same should be provided at the time of bidding).
26	Each incident shall be able to associate multiple activity logs entries via manual update or automatic update from other enterprise management tools.
27	The proposed helpdesk system shall be able to provide flexibility of incident assignment based on the workload, category, location etc.

28	The proposed solution should automatically provide suggested knowledge base articles based on Incident properties with no programming
29	The proposed solution should automatically suggest available technicians based on workload, average ticket closure time assigning tickets with no programming
30	The proposed solution should tightly integrate with monitoring system to provide two-way integration - E.g. when system down alarm created, it should automatically create ticket and assign it to technician, in case system comes up before ticket is resolved by technician, it should automatically close the ticket to minimize human efforts
31	The proposed system must not create more than one ticket for same recurring alarm to avoid ticket flooding from Monitoring system
34	The solution should be capable of running in Linux platform and should be 64-bit application to fully utilize the server resources on which it is installed
35	Proposed NMS solution must be ISO 27001:2013 / ISO 27034, CIS Certified to ensure security compliances.
36	OEM Should provide support for 5 Years with all upgrades and updates during the contract Period.

27) ALL in One Colour printer

S.n	Technical Specifications	
1.	Print Technology	Laser
2.	Type of Printing	Mono
3.	Cartridge Technology	Separate Drum and Toner.
4.	Platen/Flatbed Size	A3
5.	Paper Size (Original/Image)	A3/A3
6.	Document Feeder	Yes
7.	RAM size (MB)	3 GB or above
8.	Hard Disk	250 GB Minimum
9.	Minimum Speed per Minute in A4 Size-Mono	45 PPM or better
10.	Scanning Feature Availability	Yes
11.	Duplexing Feature Availability	Yes, Automatic
12.	Network Interface	Ethernet 10/100/1000
13.	Wi-Fi Connectivity	Yes
14.	Number Of main paper tray	500 minimum 1 of A3 &1 of A4
15.	Bypass Facility	Yes
16.	Bypass Tray Facility	100 or more
17.	Original Document Feeder Type	SPDF
18.	Life of Drum in terms of number of Prints	2,00,000 or above
19.	Duty Cycle (No. of Print/ month)	30,000 or above
20.	BIS registration	Yes
21.	Other Certifications Available	UL, CE, FCC & RoHS
22.	Metal Trolley / stand	Yes
23.	On Site OEM Warranty (Year)	3 or more

28) Customized furniture

The Successful bidder has to provide furniture for Control Room sitting arrangement & other requirement as per industry standards. Sample has to be approved by the purchaser. The bidder has to ensure industry-leading practices are kept in mind ensuring aesthetics of the room

29)ANPR Software

S.No	Functional requirement
1	Vehicle Detection and Video Capture Module
A	The System should automatically detect a vehicle in the camera view using video detection and activate license plate recognition. Suitable external IR Illuminator with Eye Safety test report/ equivalent certification should be used in conjunction with ANPR camera for detection of number plates during night-time.
2	License Plate Detection
A	The System shall automatically detect the license plate in the captured video feed in real-time.
B	The system shall perform OCR (optical character recognition) of the license plate characters (English alpha-numeric characters in standard fonts).
C	The System shall store JPEG image of vehicle and license plate and enter the license plate number into Postgre SQL database along with date time stamp and site location details.
D	System should be able to detect and recognize the English alpha numeric License plate in standard fonts and formats of all vehicles including cars, HCV, and LCV.
E	The system should be able to process and read number plates of vehicles with speed of 180 km/hr and above.
F	The system shall be robust to variation in License Plates in terms of font, size, contrast and colour and should work with good accuracy.
G	The system should do processing locally on the LPU installed at the ANPR camera location/ junction, to avoid any time lag and performance issue due to network disconnection, bandwidth constraints, etc.
3	Colour Detection
A	The system shall detect the colour of all vehicles in the camera view during daytime and label them as per the predefined list of configured system colours. The system will store the colour information of each vehicle along with the license plate for each transaction in the database.
B	The system shall have options to search historical records for post event analysis by the vehicle colour or the vehicle colour with license plate and date time combinations.
4	Alert Generation
A	The system should have option to input certain license plates according to the hot listed categories.
B	The system should be able to generate automatic alarms to alert the control room personnel for further action, in the event of detection of any vehicle falling in the Hot listed categories.
5	Vehicle Log
A	The system shall enable easy and quick retrieval of snapshots, video and other data for post incident analysis and investigations.
B	The system should provide advanced and smart searching facility of License Plates. There should be an option of searching number plates almost matching with the specific number entered (up to 1- and 2- character distance).
6	Central Management
A	The Central Management Module shall run on the ANPRS Central Server in control booth.

	It should be possible to view records and edit hotlists from the Central Server.
B	The system should have reading accuracy of minimum 90% on vehicles and above which are visible by human eye for English alphanumeric number plates.
C	The proposed system should have the capability to transfer the data to Central Command Centre in real time.

G-Functional requirement

G 1-Video analytics

1. Surveillance system shall have the capability to deploy intelligent video analytics software on any of the selected cameras.
2. This software shall have the capability to provide various alarms & triggers.
3. The software shall essentially evolve to automate the suspect activity capture and escalation; eliminate the need of human observation of video on a 24x7 basis.
4. Analytics software shall bring significant benefit to review the incidences and look for suspicious activity in both live video feeds and recorded footages.
5. The software shall have filters to distinguish between humans, animals, vehicles or objects.
6. The video analytics software shall be implemented at the server level in central datacenter compatible with windows server OS or Linux for highest performance and reliability.
7. Various video analytics that shall be offered on identified cameras are:-
a) Loitering /Vandalism around area under observation
b) Video Loss Alarm
c) People Head Counting or Crowd Recognition
d) Camera Tampering/Camera ON/OFF video alarms
e) Image Masking- Privacy Protection Video Tracking of Person
f) Video Tracking of Person/Object in field of view
g) Left/Abandoned Item Detection and Removed Item Detection
h) Virtual Fence/Perimeter Breach/ Entry –Exit in restricted zone

G 2-Automatic number plate recognition system

1. The ANPR System shall enable monitoring of vehicle flow at strategic locations.
2. The system shall support real-time detection of vehicles at the deployed locations, reading its number plate, database lookup from central server and triggering of alarms / alerts based on the vehicle status as specified in the database.

G3- General

Ensure provision of latest version of licensed software and compatibility with 3rd party components / solutions for seamless integration.

H –Service Level Agreement (SLA)

As part of this RFP, Bidder shall ensure that redundancy and fault tolerance is considered at the components level in the actual deployment.

The following table details out service level agreement for service availability of components.

System availability (Up time): System availability shall be calculated as [100%-(Downtime / Total time) *100].

Parameter	SLA Target	Penalty	Measurement Tool/Method
Servers, Cameras, networking equipments, networking &associated Software and Hardware mentioned in BOQ or any other peripherals components.	>= 99.5% uptime	• If uptime is Less than 99.5% and Greater than or equal to 98%. Rs. 1000 / Hour Penalty Applicable. • If uptime is Less than 98.0% and Greater than or equal to 95%. Rs. 2000 / Hour Penalty Applicable. • If uptime is Less than 95.0% Rs. 5000 / Hour Penalty Applicable.	Measured 24X7X365 (measured/ calculated monthly)

Note: Penalty shall be deducted from the Security Deposit.

I-Command Control Centre

1. All camera feeds should be available for viewing by Police Personnel at any point of time.
2. Command Control Center should have simultaneous viewing capability for about 20% of all cameras.
3. The Command Center would be equipped with state of-the-art equipment's to support monitoring and analysis of video feeds.
4. For the purpose of common viewing of the cameras, video-walls/TV screens will be installed in the office.

J-Training and Capacity Building

1. 5 days hands on experiences on Video Management System (VMS) and Analytics for 10 persons.
2. Preparation of Training Material for operation, upkeep and security related subjects for technical, executive and supervisory staff.
3. Preparation of Detailed Standard Operating Procedures (SOP) for police personal to be provided in consultation with head of security.

K –Operations, Maintenance and Warranty

1. Bidder shall also be responsible for the maintenance and management of entire systems, solutions, application deployed as part of this RFP for a period of 5 year from the Go-Live date in an efficient and effective manner
2. Deploying manpower (minimum 2 operators and 1 skilled engineer) for solution maintenance and monitoring support which includes change request management, bug tracking and resolution, production support, performing version and patch updates.
3. Monitoring of all Equipment, display facilities, furnishing & finishing etc which shall be monitoring the CCTV system.
4. Annual technical support for all hardware and software components for the O & M period.
5. Preventive, repair maintenance and replacement of hardware and software components as applicable under the warranty and AMC services during the contract period.
6. Recurring refresher trainings for the users and Change Management activities.

7. Preventive, repair maintenance and replacement of non-ICT components as applicable under the warranty and AMC services during the contract period.
8. Overall maintenance of the CCTV solution and continuity of Operations as per SLAs.
9. Submit Quarterly reports as desired by the department.
10. Warranty – 5 Years

L -Other Terms & Conditions
1. Provisioning of required network bandwidth, Internet bandwidth and connectivity at various locations to connect with CCTV Solution shall be done by Bidder.
2. The maintenance phase will be for a period of 5 (five) years after Go-Live.
3. The successful bidder shall supply, commission and integrate the underlying infrastructure required for running the applications and managing the entire system.
4. The bidder as the part of overall solution should consider latest & innovative technologies and propose the most optimal solution. The solution implemented for this project needs to be highly secure, considering that it is intended to handle sensitive data.
5. Bidder shall be responsible for obtaining all permissions and approvals necessary to install the systems components as per the design.
6. During project period, in the event of any damage to CCTV cameras due to accident or due to any other unforeseen circumstances, the bidder shall repair/replace the camera within 5 days of the said incident. Failure to comply with the time period shall attract penalty as mentioned in SLA.
7. Shelf-life of Hardware should be min. 5 Years.
8. Manufacturing Date of Hardware Products supplied should be in Year 2023 or later.
9. The bidder should have successfully executed and implemented at least one supply order of similar CCTV project worth of minimum50% of the Quoted Bid Price, in Central or State Govt/Govt Undertaking /PSU/ International organizations/ Autonomous - Semi Autonomous bodies of Central/State Government in last five years (i.e., 2018-2019, 2019-2020 ,2020-2021 , 2021-2022, 2022-2023). Copy of PO must be enclosed as proof.

Payment Milestone

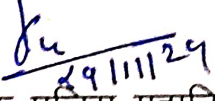- 50% On Supply of all items.
- 50% On Go Live

OEM MAF:- Compulsory for this Item
1. CCTV Cameras
2. VSM Software
3. ANPR Software
4. Firewall
5. Storage
6. All Switches

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विशेष शाखा, पुलिस मुख्यालय, मध्यप्रदेश, भोपाल

कमांकः–विशा / स्टोर / 2024–25(562), दिनांक–29.11.2024

निविदा सूचना का शुद्धिपत्र

विशेष शाखा पुलिस मुख्यालय की निविदा सूचना कमांक SB/Store/2024-25 (535), Dated- 13.11.2024 द्वारा CCTV Surveillance Systems for High Court Jabalpur, Indore & Gwalior के कय हेतु ई–निविदा सूचना जारी की गई है। उपरोक्त आमंत्रित निविदा में कय किये जाने वाले उपरोक्त उपकरण की **वित्तीय निविदा** में आंशिक संशोधन के संबंध में **"शुद्धिपत्र"** (Corrigendum) जारी किया गया है जो website https://mptenders.gov.in/nicgep/app पर उपलब्ध है।

सहायक पुलिस महानिरीक्षक
विशेष शाखा(जी), म.प्र. भोपाल
दूरभाष कं0 0755–2443654
ईमेल:sec25-sb@mppolice.gov.in

विशेष शाखा, पुलिस मुख्यालय, मध्यप्रदेश, भोपाल

क्रमांकः—विशा / स्टोर / 2025—25(22), दिनांक— 17.01.2025

निविदा सूचना का शुद्धिपत्र

विशेष शाखा पुलिस मुख्यालय की निविदा सूचना क्रमांक SB/Store/2024-25 (535), Dated-13.11.2024 द्वारा CCTV Surveillance for High Court Jabalpur, Indore & Gwalior के क्रय हेतु ई—निविदा सूचना जारी की गई है। उपरोक्त आमंत्रित निविदा में क्रय किये जाने वाले उपरोक्त उपकरण की **समय—सारणी** में आंशिक संशोधन के संबंध में **"शुद्धिपत्र"** (Corrigendum) जारी किया गया है जो website https://mptenders.gov.in/nicgep/app पर विभाग की वेबसाईट www.mppolice.gov.in पर उपलब्ध है।
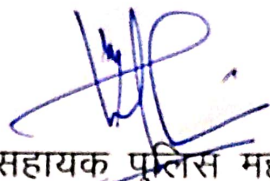
सहायक पुलिस महानिरीक्षक
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SPECIAL BRANCH, M.P. BHOPAL
Tender Notice No. SB/Store/2024-25 (535), Bhopal Dated 13.11.2024

CORRIGENDUM

4. Tender Schedule:

S.n.	Tender Activity	Previous Date & Time	Corrigendum for New Date & Time
	Item Name: CCTV Surveillance for High Court Jabalpur, Indore & Gwalior		
iv)	Last date of Online E-Tender Submission	20.01.2025 up to 16.00 hrs.	**10.02.2025 up to 16.00 hrs.**
v)	Bid will be opened on	21.01.2025 at 16.00 hrs.	**11.02.2025 at 16.00 hrs.**
vi)	Demonstration from	30-31.01.2025 at 11.00 hrs	**25-26.02.2025 at 11.00 hrs.**

सहायक पुलिस महानिरीक्षक
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