

Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP Surveillance system along with all the hardware, VMS software & associated cablings at NEIGRIHMS and Integration with existing system.

Eligibility Criteria:

1. The Bidder must be the sole Bidder (i.e. Company/Society/Trust/ Partnership Firm/ LLP/Proprietorship).
2. The Bidder should be other than consortium of Companies. It should be any registered entity such as (i) Company registered under Companies Act, 1956/2013 or an equivalent law outside India; or (ii) Society registered under Societies Registration Act, 1860 or equivalent law applicable in any State of India; or (iii) Trust formed according to the provisions of Indian Trust Act, 1882 or (iv) equivalent law applicable in any State of India or Partnership firm or LLP (v) Proprietorship firm registered with any government entity.
3. The bidder shall not have a conflict of interest that affects the bidding process. Any bidder found to have a Conflict of Interest shall be disqualified. Bidder shall be deemed to have a Conflict of Interest affecting the Bidding process, if:
 - (a) Constituent of Bidder is also a constituent of another applicant/Bidder; or
 - (b) Such Bidder thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder; or
 - (c) Such Bidder has the same legal representative for purposes of this Bid as any other applicant/Bidder; or
 - (d) Such Bidder has a relationship with another Bidder, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each other 's information about, or to influence the Bid of either or each other; or
 - (e) Such Bidder has participated as a consultant to the Authority in the preparation of any documents, design or technical specifications of the Project.
4. The bidder shall be liable for disqualification and forfeiture of Bid Security if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Bidder, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the e-Bidder, in the past but its assignment expired or was terminated 12 (twelve) months prior to the date of issue of this GeM Tender Document. Nor shall this disqualification apply where such adviser is engaged after a period of 5 (five) years from the date of commercial operation of the Project.
5. To be eligible for Bidding and award of Contract under this GeM Tender Document, Bidder shall fulfill following conditions of eligibility and submit the proofs as specified for each condition of eligibility.
6. Unconditional Acceptance Letter: As per annexure III

Serial No:	Eligibility Criteria for Bidders	Relevant Documents to be submitted.
1	<p>In case of sole Bid, the Bidder:</p> <p>a. Should be a registered legal entity such as:</p> <p>(i) Company registered under Companies Act, 1956/2013 or an equivalent law outside India; or</p> <p>(ii) Society registered under Societies Registration Act, 1860 or equivalent law applicable in any State of India; or</p> <p>(iii) Trust formed according to the provisions of Indian Trust Act, 1882 or equivalent law applicable in any State of India.</p> <p>(iv) LLP Firm registered by MCA.</p> <p>(v) Partnership firm registered under partnership act.</p> <p>Proprietorship firm registered with any government entity.</p>	<p>In case of sole Bids, the Bidder shall submit:</p> <p>a. Company or Society or Trust or LLP or Partnership or Proprietorship firm registration certificate.</p> <p>b. Copy of the PAN CARD of the Proprietor/Partnership firm/LLP/ Company/Trust/Society.</p> <p>c. GST Registration certificate.</p>
2	<p>The technical requirement of the e-Bidder should be as given below:</p> <p>a. The Bidder must have similar experience in Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings in Central/State Govt. Organization/ PSU/ Industrial Unit/ Central/State Govt. hospital.</p>	<p>Copies of work award letters along with completion certificate, extension letters (if any), similar work orders/ Agreements for the Contracts executed in past 5 years in support of the experience to be submitted as per in Annexure II.</p> <p>a. Similar work order one order 35% of the total estimated bid value or,</p> <p>b. Two orders 20% of total estimated bid value or,</p> <p>c. Three orders 15% total estimated bid value</p>
3	<p>The financial capability: -</p> <p>The Bidder must have minimum average annual turnover of INR 2,00,00,000.00 (Rupees Two Crores only) for last three (03) consecutive years (2024– 25 2023 – 24, 2022 – 23)</p>	<p>Audited Balance Sheet and Profit & Loss Statement / Declaration duly Certified by CA for last three (03) consecutive years (2024 – 25, 2023 – 24, 2022 – 23).</p>
4	<p>Other Relevant Documents</p>	<p>1. The Bidder will also have to make a presentation on detailed work plan as part of technical evaluation regarding the execution of work.</p> <p>2. Documents establishing good's conformity to Bidding document:</p> <p>2a. The Bidder shall provide in its Bid the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the Bid fully conform to the goods and services specified in the Bidding Document. For this purpose, the Bidder shall also</p>

		<p>provide a clause by-clause commentary on the technical specifications and other technical details incorporated in the Bidding Document to establish technical responsiveness of the goods and services offered in its Bid.</p> <p>2b. In case there is any variation and/or deviation between the goods & services prescribed by that offered by the Bidder, the Bidder shall list out the same in a chart form without ambiguity and provide the same along with its Bid.</p> <p>2c. If Bidder furnishes wrong and/or misleading data, statement(s) etc. about technical acceptability of the goods and services offered by it, its Bid will be liable to be ignored and rejected in addition to other remedies available to the authority in this regard. If Bidder furnishes wrong and/or misleading data, statement(s) etc. about technical acceptability of the goods and services offered by it, its Bid will be liable to be ignored and rejected in addition to other remedies available to the authority in this regard.</p> <p>2d. Self-attested copy of required certificate of experience in desired period as mentioned in Tender Notice.</p> <ol style="list-style-type: none"> 1. Self-attested copy of proof relating to deposit of EMD. 2. Self-attested copy of MSME / Startup Certificate in case EMD Exemption is sought. 3. The Bidder should submit the Original Hard Copy of Manufacturer Authorization Form (MAF) in format given in Annexure- I of the quoted item (All Items) duly ink signed by the authorized signatory within 7 days from the date of submission of bid. Documentary evidence for tie-ups/ techno-commercial collaboration with subsystems/ peripheral manufacturers to be submitted. A Letter from each such subsystems/ peripheral manufacturer needs to be furnished ensuring the support for 5 years. 4. Bidders should provide an escalation matrix for their sales & support function. The vendor must have a strong (24X7) telephone/web-based customer care cell and complaint registration mechanism.
5	<p>Non-Blacklisted</p> <p>The Bidder should not have been barred or blacklisted by the Government of India, Government of Meghalaya or by any State Governments in India for breach of Contractual Conditions as on Bid submission date and should not be involved in any pending /ongoing CBI Litigations.</p> <p>Also, the Bidder should not have been</p>	<p>The Bidder shall have to submit an affidavit as part of the Technical Bid (Annexure V).</p>

	convicted/charge-sheeted in any criminal case in respect to the nature of work involved in the Contract with any of the State Government or Union Government. The Bid may be rejected on submission of false affidavit.	
6.	The quoted item must have warranty for 3 years and comprehensive support post warranty for additional 4 Years. The bidder must provide the supporting Ink Signed Manufacturer Authorization Form (MAF) in the format given in Annexure I.	Fill up Annexure 1.
7	<p>The warranty period shall be taken into account from the date of completion of supply of products, its successful installation/commissioning and acceptance by NEIGRIHMS, Shillong.</p> <p>During the warranty period, besides service/maintenance of Hardware, all spares for smooth functioning of the machinery shall also be provided at no extra cost.</p>	Acceptance Letter from bidder.
8	Duration for completion	The maximum period for delivery and installation of the item from the date of issuance of purchase order is 180 Days .
9	Deviation Statement	No Deviation statement to be submitted as per Annexure: X
10	Integrity Pact	Successful bidder should submit Integrity Pact as per Annexure: XI within 30 days of bid award.
11	Payment Terms	<p>Payment Terms:</p> <ul style="list-style-type: none"> a. For Supply: 90% payment within 30 days from the date of receipt and acceptance of complete supply materials at site. The balance 10% amount on successful commissioning. <p>Note: Balance 10% payment against material supply can also be claimed on submission of BG of equivalent amount if installation & commissioning is delayed due to non-availability of site clearance, by more than 12 months from the date of receipt and acceptance of last supply material. The validity of the said BG shall be valid till expiry of warranty period plus additional 3 months claim period.</p> <ul style="list-style-type: none"> b. For Service: 100% after successful completion of installation & commissioning against submitted invoice along with supporting documents duly certified by NEIGRIHMS, Shillong. c. For Post warranty- CAMC: Pro rata on quarterly basis, against submitted RA bill invoices along with supporting documents duly certified by NEIGRIHMS, Shillong.
12	Land Border Sharing	Bidder shall supply the items as per the specification and requirements mentioned in the tender. However, Bidder shall note that CCTV

		<p>system items (sensitive security items related to Surveillance/Networking etc.) of countries sharing land border with India shall not be acceptable and hence shall not be offered by bidders. This clause shall be applicable for the following items: CCTV Cameras, NVR, Networking items like switch, modules etc. any configuration software, VMS etc. Bidder to give a signed declaration in their letter head.</p> <p>Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as per Gol Order No. F. No. 6/18/2019-PPD Dated 23.07.2020 & subsequent notification issued by Gol. Proforma to be submitted by the bidder for Self-Certification on Land Border Share as per Annexure VIII.</p>
13	Technical Compliance	<p>Bidder mandatorily requires to submit "Certificate of Compliance" as per Technical Specification. This certificate need to be submitted by the respective OEM on their Letter Head and should be sealed and signed by the authorized signatory on behalf of the bidder and hard copy of the same need to be submitted within 7 days from the date of submission of bid. Non submission of the same may lead to disqualification for Techno-Commercial evaluation of the submitted bid.</p>
14	Trade License	<p>The qualified bidder must submit the KHADC License within 90 days from the date of award of contract.</p>
15	Cyber Security	<p>The regulatory Approvals /Certifications are to be provided from STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of MEITY empaneled Information Security Auditing Organization for the Cameras quoted under this project.</p>
16	Purchase Preference as per MII Clause	<p>The Bid is reserved to be procured from 'Class-I local supplier' or 'Class-II local supplier', as defined in the Gol Order No P-45021/2/2017-PP (BE-II) Dated 04.06.2020 & subsequent notification issued by Gol. Proforma for Self-Certification on Local Content as per Annexure IX to be uploaded along with the bid. Without this the Bid will be liable for rejection without asking for any clarification. As it's a turnkey project, the order shall be non-divisible in nature & Purchase Preference shall be given to Class-I local supplier over Class-II local supplier as per following procedure:-</p> <ol style="list-style-type: none"> Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contractor will be awarded to L1. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's

		<p>quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.</p> <p>c. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class- I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price; the contract may be awarded to the L1 bidder.</p> <p>The margin of Purchase preference shall be 20%.</p> <p>Any non-Local Supplier who is having Minimum Local Content (MLC), less than 20%, will not be eligible to participate in this bid.</p>
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ADDITIONAL TERMS & CONDITIONS

- a. Bidder should upload duly signed stamped Undertaking Letter for GST Compliance as per Annexure IV.
- b. Bidder should deploy sufficient plant and machinery as per the requirement of work in consultation with the Project Manager/In Charge to achieve the milestones/targets and overall completion within the time period. The bidder shall submit a scanned copy of 'Self Declaration/ Undertaking' on Company's Letter head.
- c. Companies other than proprietorship firm shall submit, scanned copy of Authorization Letter/Power of Attorney along with copy of Certificate of Incorporation of the Company under Companies Act showing CIN/LLPIN/Name of Directors of the Company & copy of Board Resolution regarding Authority to assign Power of Attorney as per Annexure VIII.
- d. The bidder shall be either original equipment manufacturer (OEM) or their authorized dealer/representative. In case of OEM, proof of being OEM shall be submitted. In case of authorized dealer/representative, bid specific authorization certificate issued for CCTV, Storage, VMS, Switches, Server, UPS & Passive components by respective OEMs are to be submitted. Ink signed copy to be submitted within 7 days from the date of submission of the bid without this the Bid will be liable for rejection without asking any clarification.
- e. The technical compliance of CCTV, Storage, VMS, Switches, Server, UPS & Passive Items to be given on OEMs letterhead duly ink signed and stamped by authorized signatory. Name, Designation & Phone number should be mentioned along with the signature. Hard copy of the same to be submitted within 7 days from the date of submission of the bid, failing this Bid will be liable for rejection without asking any clarification. The same declaration should be submitted in GeM.
- f. Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. NEIGRIHMS can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch in technical parameters found then bid will be liable for rejection.
 - g. All types of Switches & SFP Modules should be from the single OEM for seamless integration.
- h. The bidder should have registered office with service center in eastern/northeastern region in India. Documentary evidence of registered office to be furnished for last 7 years.
- i. Camera OEM should have direct Presence & Manufacturing in India from last 7 years. (not as joint venture, partnership firms or through any association) and R&D unit registered with Department of Scientific and Industrial Research (DSIR) in India. OEM should submit Manufacturing and DSIR certificates.
- j. The Camera OEM should have their own service center and warehouse in India (Service Centre Trade

License / GST Registration Certificate to be submitted).

- k. The Camera OEM or any of its divisions or group companies must never been banned, blacklisted or their procurement discontinued by any government/ PSU organizations in India in last 5 Years. A declaration to this effect shall be provided by the OEM on their letterhead. If any violation or false declaration is found, both the OEM and the Bidder will be blacklisted by the tendering authority.
- l. The camera OEM or any of its divisions or group companies must never been suspended or banned or blacklisted by ONVIF in last 5 Years **And OEM should be full member**. The OEM on their letterhead shall provide a declaration to this effect. If any violation or false declaration is found, the tendering authority will blacklist both the OEM and the Bidder.
- m. The cameras shall be manufactured by a firm/ OEM whose quality system is in compliance with the ISO 9001: 2015, ISO 14001-2015, ISO27001-2013 and ISO 45001-2018 Quality Systems, **ISO20000, ISO 50001, ZED Gold, GDPR, CMMI-5**.
- n. Vendor need to provide Test Certificate as mentioned in the specification.
- o. The bidder shall attend at his own expense and get the defect/bugs removed in the systems as detected by NEIGRIHMS, Shillong during the period of warranty.
- p. Bidder shall supply the items as per the specification and requirements mentioned in the tender. However, Bidder shall note that CCTV system items (sensitive security items related to Surveillance/Networking etc.) of countries sharing land border with India shall not be acceptable and hence shall not be offered by bidders. This clause shall be applicable for the following items: CCTV Cameras, NVR, Networking items like switch, modules etc. any configuration software, VMS etc. Bidder to give a signed declaration in their letter head.
- q. The technical specification and requirements of the main supply items are indicated in Annexure - IV of this tender. The bidder shall note that the tender specifications and quantities indicated are the minimum requirements only. Any other item (hardware, Software, or accessories) not specified in the tender but required for successful installation and commissioning of the supplied CCTV system in all respect shall be in bidder's scope. Bidder to note the same and quote accordingly.
- r. Submission of Design document for approval before installation.
- s. For any queries/clarification related to this bid, the bidder should raise their concerns only through GeM's representation window, any other means of communication apart from GeM's representation window will not be entertained.
- t. EPBG for 5% will be applicable for the SITC works for a duration of 36 months. On successful completion of the EPBG of SITC, the bidder will be required to submit another EPBG of 5% (or prevailing rate as per government norms) which will be applicable for the Comprehensive AMC part for a duration of another 48 months.
- u. **Benefits to micro & small enterprises (MSEs) & Startups:** As per Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012, exemption from payment of earnest money deposit (EMD) will be provided to registered MSEs bidders. The valid MSE certificate is to be uploaded by the bidder. As per Ministry of Finance O.M. dated 25th July, 2017, the Startups are exempt from submitting EMD.
- v. The bidder should quote total Price of all the Items in the BOQ in the Price Part of "Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings and Integration with Existing System". The Bidder shall submit a self-declaration indicating that they have quoted for the entire scope of work as per BOQ items mentioned in the technical specification. Bidder shall not indicate any price part in Technical Document Portion. Bidder's indicating price part in any Technical Documents shall be liable to be rejected. Successful Bidder shall furnish the Price Break-up as per the BoQ's after the placement of Award.
- w. The local content for the purpose of the tender shall be the aggregate of local contents of individual supply items as declared. In case the local content is not declared for any individual items, the local content for the same shall be considered as NIL.
- x. **Cyber Security:** The regulatory Approvals /Certifications are to be provided from STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of **MeitY** empaneled Information Security Auditing Organization for the Cameras quoted under this project.
- y. Canvassing in any other form by the bidder or by any other agency on their behalf may lead to disqualification of their bid.

- z. In case any of the document/information(s) furnished by a bidder are found to be false/forged, such bidder shall be kept in holiday list/ blacklist apart from other penal actions as deemed fit by NEIGRIHMS, Shillong.
- aa. Repeat Order shall be acceptable to the vendor within 6 months from the date of the Basic Order at the same prices, terms & conditions as that in the Basic Order.
- bb. All Annexures to be filled & signed.
- cc. The bidder should have successfully executed one order in last 7 years of 100 camera installation in any Central Govt./PSU Hospital across India, documentary proof to be submitted.

ANNEXURE – I: **MANUFACTURER'S AUTHORIZATION FORMAT**

To

**The Director
NEIGRIHMS,
Shillong**

Dated.....

Subject: Manufacturer Authorization for Tender No _____.

Sir,

We, **<Bidder/ Frontline OEM/SI>** having our registered office at **< Bidder/ Frontline OEM/SI address>**, are an **established manufacturer/Suppliers** of **< name of quoted item >**. We **<Frontline OEM/SI>** solely authorized **<bidder's name>** to quote our product for above mentioned tender.

Our full support is extended in all respects for supply, warranty and maintenance of our products. We also ensure to provide service support for the supplied equipment for a period of 5 years from date of installation of the equipment as per tender terms. In case of any difficulties in logging complaint at bidder end, user will have option to log complaint at our call support center.

We also undertake that in case of default in execution of this tender by the

<Indicate names of all supporting OEM/SI >, the **< Bidder/ Frontline OEM/SI >**

will take all necessary steps for successful execution of this project as per tender requirements.

Thanking You

For **< Bidder/ Frontline OEM/SI>**

< (Authorized Signatory)> Name: Designation:

ANNEXURE – II: PROOF OF COMPLETION OF CCTV PROJECTS

To

The Director

NEIGRIHMS, Shillong

Dated.....

Subject: Proof of completion of Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings projects for Tender No.

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Sir,

This is to confirm that, we.....firm/company have completed

_____ project worth for project in the financial year.

The details of the project have been furnished below:

Sl. No.	Project # <To be replicated for each project>	Details
1.	Name of Project	
2.	Name of Client	
3.	Name of client personnel involved	
4.	Phone number of client personnel	
5.	Email id of client personnel	
6.	Number of items supplied	
7.	Duration of the project	
8.	Years of execution of the project	
9.	Project Value	
10.	Remarks, (including shortcomings, if any.	

Thanking You

**(Authorized Signatory with
Seal) Name: Designation:**

Annexure III: UNCONDITIONAL ACCEPTANCE LETTER

(On the letter head of the Firm)

To,

Subject: ACCEPTANCE OF NEIGRIHMS' TENDER CONDITIONS, Reg

Sir,

1 The Tender Document for the Work "Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings and Integration with Existing System" has been issued to me/us by NEIGRIHMS, Shillong and I / We hereby certify that I / We have inspected the site and read the entire Terms and Conditions of the Tender Document downloaded from the Government e-Marketplace Portal, which shall form part of the Contract Agreement and I / We shall abide by the Conditions / Clauses contained therein.

2 I / We hereby unconditionally accept(s) the tender conditions of NEIGRIHMS' tender documents in its entirety for the above work.

3 The contents of the clauses of the Tender Document have been noted and it is clarified that after unconditionally accepting the tender conditions in its entirety, it is not permissible to upload any additional file or any remarks/conditions (except unconditional rebate on quoted rates if any) in the Tender Document and the same has been followed in the present case. In case this provision of the tender is found violated after opening of tender, I/We agree that the tender shall be rejected.

4 "That I / We declare that I / We have not paid and will not pay any bribe to any officer of NEIGRIHMS for awarding this contract at any stage during its execution or at the time of payment of bills, and further if any officer of NEIGRIHMS asks for bribe / gratification, I will immediately report it to the Appropriate Authority in NEIGRIHMS".

5 I/We hereby declare that myself or any of the Directors / Partners of this company / Firm is not a Director of any other company or partner of a concern or a sole proprietor having established business with NEIGRIHMS and has not outstanding dues payable to the Authority.

Sincerely Yours,

(Signature of the Tenderer with Company Seal)

Plac

e:

Date

:

Annexure IV: GST UNDERTAKING

(On the letter head of the Firm)

This is regarding the work: Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings and Integration with Existing System.

I Mr./Mrs. _____ proprietor/partner/Director of M/s.
_____ do hereby undertake:

1. That, My/Our concern is registered under GST and compliance of GST provision.
2. That, In case of non-compliance of GST provisions and blockage of any input credit, I/our concern shall be responsible to indemnify NEIGRIHMS.
3. That, all input credits have been passed on to NEIGRIHMS by me/our concern.

(Signature of the Contractor with seal)

Date:

Place:

Annexure:V: UNDERTAKING REGARDING DEBARMENT / BLACKLISTING

(To be submitted on Company's letter head)

Name of work: Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings and Integration with Existing System.

I/We (name and post of authorized signatory) on behalf of (Name of firm) do here by solemnly affirm and declare as follows:

- i) Our firm is not restrained/ debarred/ blacklisted by NEIGRIHMS or Central / State Govt. Depts./PSUs/World Bank/ADB etc. and the debarment is not in force as on last date of submission of proposal.
- ii) None of Proprietor /Partners /Board Members / Directors of M/s... (Name of firm) has remained Proprietor /Partner /Board Member /Director in any firm which stands debarred /blacklisted by NEIGRIHMS or Central /State Govt. Depts. /PSUs /World Bank /ADB etc. and the debarment is not in force as on last date of submission of proposal.
- iii) Our firm understands that at any stage, if above statements are found to be false, our firm shall be liable for debarment from bidding in NEIGRIHMS, apart from any other appropriate contractual legal action including debarment/ blacklisting, termination of the contract etc. as deemed fit.

[Signature and name of the authorized signatory of the firm]

Date:

Place:

Annexure VI: POWER OF ATTORNEY FORMAT FOR THE AUTHORIZED PERSON(S)

(Bidder shall submit irrevocable power of attorney on a non-judicial stamp paper of Rs.100/- Signed by authorized signatory as per Memorandum of Articles authorizing the persons, who are Signing this bid on behalf of the company)

BY THIS POWER OF ATTORNEY executed on _____(Date)
we _____(Company Name) a Company incorporated under the
Provisions of companies Act, 1956 having its Registered Office at
_____(Company Address)(hereinafter
referred to as the "Company") do hereby severally appoint, constitute and nominate
_____(Name of Attorney) official(s) of the Company, so long as
they are in the employment of the Company (hereinafter referred to as the "Attorneys") to sign
agreement and documents with regard Bid No.
_____(Tender ID) due on
_____(Last Date of Tender Submission) invited by NEIGRIHMS,

.....
.....for "Supply, Installation, Testing & Commissioning of Video Management Software
(VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated
cablings and Integration with Existing System" and to do all other acts, deeds and things they said
Attorneys may consider expedient to enforce and secure fulfilment of any such agreement in the
name and on behalf of the Company AND THE COMPANY hereby agrees to ratify and confirm all
acts, deeds and things they said Attorneys shall lawfully do by virtue of these authorities hereby
conferred.

IN WITNESS WHEREOF, this deed has been signed and delivered on the day, month and year
first above written by Mr. _____(Name of the
Person authorized by Board of Directors / Director's Name, as applicable) Authorized Signatory,
duly authorized by the Board of Directors of the Company vide its resolution passed in this regard.

By order of the Board

For _____

(_____)

Authorized Signatory (Signature of the Person authorized by Board of Directors or Signature of Director, as
applicable)

Witness:

1. (Signature of Witness 1)

2. (Signature of Witness 2)

Attorney Signature of Mr. _____

Attorney Signature of Mr. _____

(Attested by)

(_____)

Authorized Signatory

Annexure VII: Self-Certification for Local Content

Name of the Work: Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings and Integration with Existing System.

I,

.....

..... hereby solemnly affirm and declare as under:

1. That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Order, 2017 (hereinafter PPP-MII order) of Government of India issued vide Notification No:P-45021/2/2017 - BE-II dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any and
2. That the information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring entity/ NEIGRIHMS or any other Government authority for the purpose of assessing the local content of goods/services/works supplied by me for "SITC of CCTV System at NEIGRIHMS and Integration with Existing System"
3. That the local content for all inputs which constitute the said goods/services/works has been verified by me and I am responsible for the correctness of the claims made therein.
4. That the goods/services/works supplied by me for "" meets the 'Minimum Local Content 'as defined in the PPPMII order & the overall Local Content is _____%.
5. That the value addition for the purpose of meeting the 'Minimum Local Content 'has been made at following location: -

S. No	Item Description	Location at which value addition has been made (Full Address)	Local Content %
1			
2			

6. I / We also understand that false declarations will be in breach of the Code of Integrity under Rule 175(1) (i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
7. I agree to keep the following information in the Company's record for a period of 10 years and shall make this available for verification to any statutory authority.
- i. Name and details of the Local Supplier (Registered Office, Manufacturing unit location, nature of legal entity).
 - ii. Date on which this certificate is issued.
 - iii. Goods/services/works for which the certificate is produced.
 - iv. Procuring entity to whom the certificate is furnished.
 - v. Percentage of local content claimed and whether it meets the Minimum Local Content prescribed.
 - vi. Name and contact details of the unit of the Local Supplier (s).
 - vii. Sale Price of the product.
 - viii. Ex-Factory Price of the product.

- ix. Freight, insurance and handling.
- x. Total Bill of Material.
- xi. List and total cost value of input used to manufacture the Goods/to provide services/in construction of works.
- xii. List and total cost of input which are domestically sourced. Value addition certificates from suppliers, if the input is not in-house to be attached.
- xiii. List and cost of inputs which are imported, directly or indirectly.

For and on behalf of (Name of firm/entity)

Authorized signatory (To
be duly authorized by the Board of Directors)
<Inset Name, Designation & Contact No>

Annexure VIII: Land Border share Compliance Certificate

To,

Name of the Work: Supply, Installation, Testing & Commissioning of Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware, VMS software & associated cablings and Integration with Existing System.

Subject: Land Border Share Compliance Certificate, reg.

Sir,

With reference to the aforementioned references, I would like to state that I have read the GoI OM. F.No 6/18/2019-PPD Dated 23.07.2020 clause regarding restrictions on procurement from a bidder of a country which shares a land border with India.

I certify that we are not from such a country or, if from such a country, has been registered with the Competent Authority. [Strike Out whichever is not applicable]"

I hereby certify that we fulfill all requirements in this regard and is eligible to be considered. *[Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"*

Yours faithfully,

Signature with Company stamp

Date:

Place:

Annexure IX: BoQ / Financial Bid

Part - I			
Sl. No.	Description of Items	Qty	Unit
SITC Portion			
1	SITC of 4 Megapixel or higher Infrared Network Outdoor Pan, Tilt, Zoom Camera - As per Technical Specification	6	Nos
2	SITC of 2 Megapixel or higher Infrared Network Outdoor Varifocal Bullet Camera - As per Technical Specification	90	Nos
3	SITC of 2 Megapixel or higher Infrared Network Indoor Varifocal Dome Camera - As per Technical Specification	261	Nos
4	SITC of Hardware Server for Video Management Software (3 nos. in Active-Active & 1 no. in Passive (Failover)) - As per Technical Specification	4	Nos
5	SITC of Video Management Software, VMS License & Failover VMS License For 435 Cameras - As per Technical Specification	1	Nos.
6	SITC of Hardware Storage for 60 days Recording - As per Technical Specification	1	Nos.
7	SITC of Client Workstation for Control & Live View at Control Room & Remote Site - As per Technical Specification	5	Nos
8	SITC of IP Based 8 Port KVM Switch with LCD Console - As per Technical Specification	1	Nos
9	SITC of 55" Display Unit for Client Workstation - As per Technical Specification	3	Nos
10	SITC of 3x2 49" Thin Bezel Video Wall with All Required Accessories - As per Technical Specification	1	Nos
11	SITC of Layer2 24 Port Gigabit PoE+ with 2x1/10G SFP+ Switch - As per Technical Specification	9	Nos
12	SITC of Layer2 24 Port Gigabit PoE+ with 4x1/10G SFP+ Switch - As per Technical Specification	4	Nos
13	SITC of Layer2 8 Port Gigabit PoE+ with 2x1G SFP Switch - As per Technical Specification	60	Nos
14	SITC of 4 Port Gigabit PoE with 2x1G SFP Industrial Grade Switch - As per Technical Specification	17	Nos
15	SITC of 6 Core Single Mode Armoured Optical Fiber Cable - As per Technical Specification	109200	Mtr
16	SITC of 24 Port Fiber Patch Panel (LIU) - As per Technical Specification	6	Nos
17	SITC of 12 Port Fiber Patch Panel (LIU) - As per Technical Specification	78	Nos
18	SITC of Optical Fiber Patch Cord - As per Technical Specification	180	Nos
19	SITC of Cat6 4 Pair Unshielded Twisted Pair Cable - LSZH (Indoor Purpose) - As per Technical Specification	46	Box
20	SITC of Cat6 4 Pair Shielded Twisted Pair Cable - LSZH (Outdoor Purpose) - As per Technical Specification	8	Box
21	SITC of Cat6 24 Port UTP Patch Panel - As per Technical Specification	70	Nos
22	SITC of Cat6 UTP Patch Cord - 1 Mtr - As per Technical Specification	310	Nos
23	SITC of 42U Floor Mount Server Rack at Control Room - As per Technical Specification	2	Nos
24	SITC of 12U Wall Mount Network Rack - As per Technical Specification	26	Nos
25	SITC of 6U Wall Mount Network Rack - As per Technical Specification	21	Nos

26	SITC of 6U Pole Mount Rack (Outdoor Purpose) - As per Technical Specification	17	Nos
27	SITC of 20KVA Online N+1 UPS with SMF batteries, 30 Min Backup with each UPS on full load (2 Nos UPS with Batteries = 1 Set) - As per Technical Specification	1	Set
28	SITC of 6 KVA Online UPS with SMF batteries, 30 Min Backup - As per Technical Specification	3	Set
29	SITC of 3 Core 2.5MM Electrical Cable - As per Technical Specification	7500	Mtr
30	SITC of 63Amp MCB with DB Box for UPS End - As per Technical Specification	16	Nos
31	SITC of 16Amp MCB with DB Box for Rack End - As per Technical Specification	65	Nos
32	SITC of 25MM MS Conduit - As per Technical Specification	6200	Mtr
33	SITC of 6 Mtr. GI Pole - As per Technical Specification	26	Nos.
34	SITC of Lightening Arrestor - As per Technical Specification	26	Nos.

Part - II			
Sl. No.	Description of Items	Qty	UoM
Comprehensive Annual Maintenance Contract (CAMC) of CCTV System After 3 Years of Warranty Period			
1	Providing All Inclusive comprehensive maintenance contract for the whole CCTV System after Defect Liability Period/Warranty of 3 years		
(a)	Year 1- after completion of Warranty of 3 years	1	Job
(b)	Year 2- after completion of Warranty of 3 years	1	Job
(c)	Year 3- after completion of Warranty of 3 years	1	Job
(d)	Year 4- after completion of Warranty of 3 years	1	Job

Annexure X: NO DEVIATION CERTIFICATE

(TO BE SUBMITTED IN BIDDER'S LETTER HEAD)

To

The Director
NEIGRIHMS, Shillong

Respected Sir/Madam,

With reference to subject tender, we hereby confirm that we have read the Tender Document in entirety and have understood the technical specifications, scope of the supply & work, and hereby undertake to declare that our offer complies fully to the requirements of technical tender without any deviation whatsoever, in fulfillment of the technical specifications, scope of supply and work and all other conditions, clauses & requirements of the tender.

We also understand that our offer can be rejected at the sole discretion of NEIGRIHMS, Shillong at any stage without assigning any reason, if any of the technical tender requirements is found to be deviated in part or full at any stage during evaluation of bids. We also understand that in case such deviations are detected at post order stage, NEIGRIHMS, Shillong will have the right to cancel the order on such successful bidder and take penal action as deemed fit including Holiday listing of such bidder.

Date:

Place:

Signature of Authorized Signatory

Name:

Designation:

Seal:

Annexure: XI Format of Integrity Pact

(To be executed on a non-judicial stamp paper of INR 100/-)

Refer attached format on GeM

FORM A

BIDDER's UNDERTAKING
(On Company's Letter Head)

To,

Sub: Certificate of Compliance

Bidder's Details:

Job Name:

Tender No. :

We/ I have read carefully the clause regarding restrictions on procurement from a bidder of a country which shares land boundary with India attached with this Tender Document and hereby certify that M/s. (Name of the Company/ Bidder) is:-

A. Not from such a country and is eligible to be considered for evaluation: YES / NO (*)

B (i) If from such a country but is registered with the Competent Authority: YES/NO (*)

B (ii) If from such a country valid Registration Certificate from Competent Authority is submitted with the bid: YES / NO (*)

I as the authorized signatory on behalf of the bidder certify that the company fulfills all the criteria stipulated in the Govt. Office Memorandum and is eligible to be considered for this tender.

(*): Tick Yes / No whichever is applicable.

Place:

Date:

Signature:

Name:

Designation:

Seal of the Company:

SCOPE OF WORK

A. Supply, Installation, Commissioning, Integration and Testing:

1. Supply, installation, testing, programming, adjusting, and commissioning high quality fast-acting Video Management Software (VMS) based IP CCTV surveillance system along with all the hardware & VMS software, associated cabling.
2. There is total 357 new cameras & 78 existing cameras to be integrated with the new system.
3. Installation of all the required license software for smooth working of VMS based CCTV system.
4. Scope also includes installation of VMS Server as per the requirement mentioned in the BoQ out of which 01 Server would be for standby purpose & rest in active mode. If any of the active server fails, all the cameras under that particular server should get auto migrated to the active standby server & after due rectification the cameras will migrate to its original without any interruption of the recording. Camera to be considered according to the architecture.
5. Storage should be configured with RAID-5 to prevent data loss using hot-swappable hard disk. In case of 1 Hard Disk failure the recording & historical data including schedule, time and motion should be available. The solution must have backup for minimum of 60 days from day 1.
6. Separate zone of switches to be created. Switches in each zone to be connected to each other using 1G OFC in ring topology. All the zones to have a zone master switch which to be connected to distribution switches in ring topology. Switches should be of managed type.
7. Video-wall along with matrix switcher at central monitoring room to be installed & configured.
8. There should be total 3 nos. of strategic locations for monitoring facilities locations for viewing cameras.
9. 20KVA Centralized Power backup with desired capacity with N+1 to be provided to power devices in entire hospital and A & B type quarter. Cable from each UPS to be laid to each rack. For other locations, 6KVA UPS at strategic locations.
10. List of camera locations will be provided from NEIGRIHMS
11. The vendor shall provide training on operation, Maintenance & Troubleshooting aspects of the offered CCTV camera system to NEIGRIHMS, Shillong during commissioning as well as after final handover of the system for uses. Bidder shall consider the same and quote accordingly.
12. The bidder shall arrange for all kinds of tools, tackles, testing instruments etc. as required during all operations for completion of work as per the scope of work.
13. The bidder shall arrange for all kinds of cable laying, fixing and positioning of networking racks with standard dressing, fixing and positioning of cameras, UPS power connectivity at all rack ends.

14. The total length/quantity for supply of the cable will be considered on actual.
15. The cables should be laid overhead for outdoor locations using stay wire and GI poles.
16. Any other activity / job which may not be specifically mentioned in the scope of work, but required for successful completion of the work shall be part of the bidder's scope without any extra cost to NEIGRIHMS, Shillong.
17. It shall be the responsibility of the Bidder that all necessary safety measures and precautions are invariably ensured during execution of work and NEIGRIHMS, Shillong shall not be responsible for any injuries / accidents suffered by contract labour.
18. Dedicated / Toll free Telephone No. for service support: Bidder/OEM must have dedicated/Toll free Telephone for service support.
19. Escalation matrix for service support: Bidder and OEM must provide escalation matrix of Telephone no. for service support.

B. Cabling and Marking Works:

1. For indoor laying of UTP & power cables, MS Conduit to be used.
2. For outdoor laying of cables, Poles and stay wires or equivalent to be used.
3. Cable dressing inside the control room should be proper with marking and neatly routed so that minimum space is required for the cables, and it also looks aesthetically good.
4. All the cables shall have proper marking at both ends mentioning the camera/equipment number/name it is connected to at the other end, for easy identification and maintenance.
5. 42U Racks to be installed in Server Room for hosting NVRs, Switches, LIUs and other items.
6. 12U racks for indoor purpose & hospital area only. 6U indoor racks for colleges, hostel & quarters. 6U outdoor racks for outdoor pole mount purpose only.

C. Documents: The bidder has to give full documentation of the setup which includes the following:

1. VMS Programming Manuals.
2. User and technical manuals for other bought out items like power systems etc.
3. Architectural layout.
4. Detailed Connectivity Diagram.
5. Positioning and marking of all kinds of CCTV items.
6. List of IP addresses of VMS and Cameras.
7. User ids and passwords for all kind of active devices.
8. Soft copy of all the above documentation shall also be provided in addition to hard copy.
9. Warranty Documents.
10. Toll free Number for service support.

11. Escalation Matrix for service support.

D. Maintenance and Support Services:

1. The maintenance contract period for supplied facility under this package shall be Seven (7) years commencing from Operational Acceptance. Out of which, three (03) years shall be defect liability period (DLP)/warranty from the date of taking over/operational acceptance and four (04) years Comprehensive AMC thereafter.
2. The warranty shall cover replacement of defective parts, modules and free software upgrades. In case of delay beyond 7 days for replacement/repair, if any, warranty period will be extended accordingly.
3. The support will be provided on 8 x 6 on working days. For all third-party equipment (Hardware & Software), Bidder shall have back-to-back support along with supply of spare with appropriate response time from OEM/OEM Authorized representatives. Certificates/Agreement of such support shall be shared with NEIGRIHMS, Shillong along with other documents mentioned above.
4. Bidder shall be responsible for coordination with the OEM for all matter related to the equipment. But the Bidder shall be responsible for meeting the overall response times and availability requirements specified in the Specification. Bidder shall be responsible for providing all support including but not limited to administration support, reinstallation/configuration/reconfiguration, technical assistance, troubleshooting, answering technical/operational queries, future integration/upgradation support etc. during the 7 years of maintenance contract period.
5. Bidder to have ERP for management of tickets.
6. All the spares required for maintenance shall be maintained and provided by the vendor. Standby of equal or higher configuration will be provided by the vendor on breakdown of equipment during DLP (Defect Liability period) / warranty and Comprehensive AMC period till it gets replaced/repared.
7. Take Backup of the system / configurations at regular interval as per policy/requirement.
8. MIS report to be submitted on monthly basis to NEIGRIHMS, Shillong.
9. Installation of security patches, updates as and when available or as informed by NEIGRIHMS, Shillong. Configuration of supplied software and hardware to manage/close vulnerabilities as and when required.
10. The maintenance of the System shall be comprehensive and shall comprise of the following category of works which is further elaborated for each of the different subsystems:
 - a. Preventive and Breakdown Maintenance Activity (performance monitoring, system backup, patch management, updates, urgent issues and troubleshooting) as detailed below.
 - b. Maintaining a minimum no. of specified spares. It must include 10 nos. of bullet and dome cameras, four (04) 24 port PoE and 8 port PoE switch. Should give declaration of the same upon bid award on bidder's letterhead.
 - c. Integration with new/existing equipment/system as per NEIGRIHMS, Shillong requirement.

E. Special condition of contracts:

1. All the technical specifications have to be complied to fully, (any part, compliance or conditional compliance will result in rejection of the offer); documentary evidence of these specification from OEM, technical manual and /or database should be submitted to NEIGRIHMS, Shillong.
2. All the types of supply of hardware, if some model of the offer equipment is rendered obsolete/ end of life by the successful bidder/ respective OEM higher version of model (of same make) is to be offered by the bidder with the consent of NEIGRIHMS, Shillong without any upward price implications.
3. The bidder is advised to examine site conditions and existing systems where the above-mentioned works are to be executed before quoting. Any clarification regarding nature work can be discussed with the office of In Charge, NEIGRIHMS, Shillong. No deviation/change in tender schedule and nature of work will be accepted after the tender is opened.
4. One high skilled project engineer/supervisor for project management to be provided during execution as per the below qualification:
 - a. Graduate + Technical Certified from VMS or Surveillance OEM.
5. After commissioning of the project one high skilled, one semi skilled manpower to be provided for the period of Seven years. The Salary has to be as per Central Wages Act. With PF & ESI/Mediclaim Benefits. The deputed Engineer has to be certified from the OEM for both Camera, VMS & Passive Equipment's.

List of Camera locations as below

NEIGRIHMS Hospital:			
Sl. No	Tentative/ Ideal location for installation of camera	Type of camera	No. of Camera required
OPD Block			
1	OPD Portico	Dome	02
2	Emergency Jn-OPD Portico-B-type entrance	Bullet	02
3	OPD entrance	Dome	01
4	MHIS Counter	Dome	01
5	MRD Counters	Dome	03
6	MS Office Entrance	Dome	01
7	Ortho OPD	Dome	02
8	Corridor towards Radiology HOD Room	Bullet	01
9	Ground Floor common corridor/passage	PTZ	02
10	Gynae OPD	Dome	02
11	Surgery OPD	Dome	01
12	CTVS OPD	Dome	01
13	Room 116 (Laser Room, Opthal)	Dome	01
14	Medicine OPD (HOD Room)	Dome	01
15	PAC Room (Anaesthesiology)	Dome	01
16	Med OPD 101	Dome	01
17	Med OPD 101 patient waiting area	Dome	01
18	Cath Lab Patient waiting area	Dome	01
19	Room 128 payment counter	Dome	01
20	Room 128 Patient waiting area	Dome	01
21	1 st Floor Common Corridor/passage	PTZ	02
22	Cardio OPD	Dome	02
23	Opthal OPD	Dome	01
24	Padiatric OPD	Dome	01
25	ENT OPD	Dome	01
26	2 nd Floor Common/Passgae	PTZ	02
27	Onco OPD	Dome	02
28	Urology/Neurology OPD	Dome	02
29	3 rd Floor OPD (Dental, Neuro, Psychiatry & Derma)	Dome	05
30	Dialysis Area	Dome	02
31	Radiology Cash Counter	Dome	01
32	Radiology CT Scan	Dome	01
33	Radiology MRI (New)	Dome	01
34	Blood Bank entrance	Dome	01
35	Physiotherapy (room No 900)	Dome	01
36	Dietary OPD/CSSD Corridor	Dome	01
			53

Wards/ICUs/OTs/Labs			
37	Ortho ward	Dome	01
38	Surgery Ward Female	Dome	01
39	Surgery Ward Male/Private ward entrance	Dome	01
40	Med Ward Female (-1 Level)	Dome	01
41	Dissection Hall/Neurosurgery entrance	Dome	01
42	Med Ward Male (-2 Level)	Dome	01
43	SICU Corridor	Bullet	02
44	Paediatric Ward	Dome	01
45	PICU	Dome	01
46	Cath Lab	Dome	01
47	ICCU	Dome	01
48	ART Counseling area	Dome	01
49	Behind ICCU Passage	Dome	01
50	Biochemistry Lab	Dome	01
51	Micro Store room (Near Biochemistry Lab) Passage	Dome	01
52	ICTC	Dome	01
53	Cardio Ward	Dome	02
54	Ophthal Ward	Dome	01
55	CTVS Ward	Dome	01
56	Urology Ward	Dome	01
57	ICU Entrance (from Dialysis Side)	Dome	02
58	ICU Entrance for Patient	Dome	01
59	ICU Patient waiting area/Corridor	Bullet	02
60	Neurology/ENT Male Ward	Dome	02
61	Clinical Teaching Room (2 nd Flr)	Dome	01
62	3 rd Floor OT Entrance	Dome	01
63	3 rd Floor Patient Waiting Room	Dome	01
64	Modular OT (4 th Floor) entrance	Dome	01
65	Modular OT Patient waiting Room	Dome	01
66	Gynae Ward	Dome	01
67	Gynae Ext / ENT Female	Dome	01
68	Labor Room/NICU	Dome	01
69	Private Ward (General area)	Dome	02
70	Neurosurgery ward (-1Level)	Dome	02
71	Oncology Ward (-2 Level)	Dome	02
72	Derma Ward/ENT Ext (-3 Level)	Dome	02
73	New Private ward (-4 Level)	Dome	02
74	Private Ward entrance (below -4 Level side)	Dome	01
Basic Science Block			
75	Microbiology Dept (1 st Floor)	Dome	3
76	Radio C-arm/Dexa/Erstwhile Community Med (G Floor)	Dome	03

77	Pathology & Physiology Dept (-1 Level)	Dome	04
78	Anatomy Dept (-2 Level)	Dome	02
79	Biochemistry Dept & Animal House (-3 Level)	Dome	01
Emergency Area			
80	Emergency Portico	Dome	01
81	Examination/consultation Area	Dome	01
82	Observation Area	Dome	02
83	UTP Cell Area	Dome	01
Entry/Exit/Mortuary/Ramp etc			
84	Ramp from RMO Side entrance	Dome	01
85	Dietary Entrance	Dome	01
86	Laundry Entrance	Dome	01
87	Mortuary area	Dome & Bullet	2
88	Staircase C&D Block (Emergency Exit)	Dome	02
Total :- 126 (PTZ-6, Bullet-8, Dome-112)			
Library:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Library Entrance	Dome	01
2	Outside Library covering corridor	Bullet	01
3	Reading Room outside Library	Dome	02
4	Top Floor Reading Area	Dome	02
5	1 st Floor Reading Area	Dome	02
6	1 st Floor Faculty Reading Room	Dome	01
7	1 st Floor Computer Room	Dome	01
8	1 st Floor Reading Area	Bullet	01
9	Ground Floor Reading Area	Dome	04
10	Ground Floor Reading Area	Bullet	01
11	Ground Floor Computer Room	Dome	01
Total :- 17 (Bullet-3, Dome-14)			
Indoor Stadium:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Main Entrance	Bullet	01
2	Corridors	Bullet	04
3	Gym Entrance	Dome	01
4	Inside Gym	Dome	01
5	Inside Indoor Stadium	Dome	04

Total :- 11 (Bullet-5, Dome-6)			
Hostels:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	MBBS Boys' Hostel (old)	Bullet & Dome	10
2	MBBS Girls' Hostel (old)	Bullet & Dome	10
3	RMO Hostel	Bullet & Dome	10
4	Intern Hostel	Bullet & Dome	10
5	MBBS Boys' Hostel I (New)	Bullet & Dome	10
6	MBBS Boys' Hostel II (New)	Bullet & Dome	10
7	MBBS Girls' Hostel I (New)	Bullet & Dome	10
8	MBBS Girls' Hostel II (New)	Bullet & Dome	10
9	Nursing Hostel I (New)	Bullet & Dome	10
10	Nursing Hostel II (New)	Bullet & Dome	10
11	Nursing Hostel (Old)	Bullet & Dome	10
Total :- 110 (Bullet-11, Dome-99)			
Director's Administrative Block			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Admin Block Main Entrance(Portico)	Dome	02
2	Admin Block entrance (focusing road)	Bullet	01
3	Focussing Main Road (either side)	Bullet	02
4	Faculty Block	Dome	01
5	Admin Block entrance Passage	Dome	01
6	Admin Block entrance (Estbl,II&III)	Dome	01
7	Director Chamber Lobby	Dome	01
8	DDA Office Lobby	Dome	01
9	Conference Room	Dome	01
10	Entrance (Account Section)	Dome	01
11	Outside Auditorium	Dome	01
12	Inside Auditorium	Bullet	02
13	Outside LTs Area	Dome	01
14	Examination Hall entrance	Dome	01
Total :- 17 (Bullet-5, Dome-12)			
College of Nursing (New):			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Main Entrance	Dome	01
2	Main Lobby	Dome	01
3	Lobby Towards Vice-Principal Room	Bullet	01
4	Lobby Towards Nursing Foundation Lab	Bullet	01

5	1 st Floor	Bullet	02
6	2 nd Floor	Bullet	02
7	Lower Ground Floor (Committee Room)	Bullet	01
Total :- 9 (Bullet-7, Dome-2)			
Guest House:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Guest House (New)	Bullet & Dome	06
2	Guest House (Old)	Bullet & Dome	06
Total :- 12 (Bullet-2, Dome-10)			
Public Utility Block:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Parking Area	Bullet	02
2	Entrance	Dome	01
3	Swimming Pool Area	Dome	01
4	Ground Floor	Dome	01
5	1 st Floor	Dome	01
Total :- 6 (Bullet-2, Dome-4)			
NEIGRIHMS Main Gate:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Main Gate IN	Bullet	02
2	Main Gate	Bullet	02
Total :- 4 (Bullet-4)			
Residential Complex:			
Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Director's Bungalow Gate	Bullet	01
2	Director's Bungalow (campus)	Dome	02
3	Type A Qtrs	Bullet	10
4	Type B Qtrs	Bullet	10
5	Type C&D Qtrs	Bullet	10
6	Type C Qtrs near Herbal garden	Bullet	02
Total :- 35 (Bullet-33, Dome-2)			
Other Facilities:			

Sl. No	Tentative/Ideal location for installation of camera	Type of camera	No. of Camera required
1	Children Park (A&B Type Qtrs)	Bullet	02
2	Entrance Children Park (C&D Type Qtrs)	Bullet	02
3	Staff Parking Lot	Bullet	04
4	STP Area	Bullet	02
Total :- 10 (Bullet-10)			
<u>Grand Total</u> :- 357 (PTZ-6, Bullet-90, Dome-261)			

Requirements for the CCTV System

Sl.No.	Components
1	4MP IP PTZ Camera or higher
2	2MP IP Bullet Camera or higher
3	2MP IP Dome Camera or higher
4	Server For Video Management Software
5	Unified Storage For Video Recording For 60 Days
6	VMS (Video Management Software)
7	Workstation for Live View
8	KVM Switch with LCD Console
9	55" Display for Live View of Cameras
10	Video Wall with Accessories
11	24 Port PoE Switch with 2 x 10G SFP+ Port
12	24 Port PoE Switch with 4 x 10G SFP+ Port
13	8 Port Gigabit PoE Switch
14	4 Port Industrial PoE Switch
15	6 Core Optical Fiber Cable
16	24 Port Optical Fiber LIU
17	12 Port Optical Fiber LIU
18	Optical Fiber Patch Cord
19	Cat 6 UTP Cable
20	Cat6 STP Cable
21	Cat 6 UTP Patch Panel
22	Cat6 UTP Patch Cord – 1 Mtr.
23	42U Floor Mount Rack
24	12U Wall Mount Rack with Standard Accessories
25	6U Wall Mount Network Rack
26	6U Pole Mount Network Rack
27	20KVA (N+1) Modular Online UPS with Batteries & 30 Min Backup
28	6KVA UPS with Batteries
29	Electrical Cables & Connectors
30	63 Amp MCB With Box
31	16Amp MCB With Box
32	MS Conduit
33	6 Mtr. GI Pole
34	Lightening Arrestor

A

Handwritten signatures and dates at the bottom of the page, including dates like 07/08/2024, 07/08/2025, and 07/08/2025.

Annexure IV: TECHNICAL SPECIFICATIONS

1. 4MP IP PTZ Camera or higher			
Sl. No.	Parameter	Specifications	Compliance (Yes/No)
1	Optical Zoom	30X or better	
2	Digital zoom	Minimum 16X	
3	Image Sensor	1/2.8" Progressive scanning CMOS sensor or better	
4	Focal Length	f=4.5mm~135mm or better	
5	Shutter	Auto, Manual (adjustment range: 1/1s- 1/30000s)	
6	Day/Night Switch	Auto ICR	
7	Sensitivity	i. Color mode: 0.003 lux or better ii. B/W mode: 0.0003 lux or better	
8	Compression	H.265, H.264 and M-JPEG	
9	Encoding Capability	2560x1440 @ 30fps	
10	Multiple Streams	Minimum Quad video streams	
11	S/N Ratio	>58dB	
12	White Balance	Auto/Manual	
13	WDR	120dB or better	
14	Camera features	3D Noise Reduction, Image Stabilization, BLC, HLC, Defog, Image Mirror required	
15	Privacy Mask	Minimum 4 privacy areas	
16	Inbuilt Storage	Supports a Micro SD/SDHC/SDXC card (Min. 256GB)	
17	Alarm Port	2 alarm inputs, 1 output	
18	IR Distance	Min. 250m	
19	Preset	Min. 256	
20	Pattern	Min. 12	
21	Home Return	Available	
22	Network Port	1*RJ45 10/100M self-adaptive Ethernet port	
23	Network Protocol	IPv4/IPv6, TCP/IP, UDP, IGMP, ICMP, DHCP, FTP, SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP	
24	Manual Horizontal Speed	0.1°~350°/s	
26	Manual Vertical Speed	0.1° ~ 300°/s	
27	Preset Speed	Up to 300°/s	
28	Horizontal Scan Angle	360° continuous scanning	
29	Vertical Scan Angle	0° ~ 90° (auto-flip)	
30	Power Supply	PoE + (802.3at type 2 Class 4)	
31	Power	<55W (max., heater on, IR on)	
32	ONVIF Profile S & G	Required	
33	Inbuilt Surge Protection	Minimum on Differential mode ±4KV, common mode ±4KV	
34	Anti-Static	Air discharge 8KV; Contact protection 6KV	
35	Product Certifications	IP67, IK10, CE, FCC, BIS, STQC ER	
36	Operating Temperature	-10°C ~ +60°C	
37	Operating Humidity	0 ~ 90%RH (non-condensing)	
38	Warranty	3 Years	







2. 2MP IP Bullet Camera or higher

Sl. No.	Parameter	Specifications	Compliance (Yes/No)
1	Image Sensor	1/2.8" progressive scan CMOS or better	
2	Lens Configuration	Motorized zoom lens F1.4, f=2.7-13.5mm or better	
3	Night Vision Distance	Min. 50 meters	
4	Sensitivity	Colour mode: 0.001 lux or better B/W mode: 0.0001 lux or better	
5	Exposure	Scene, Manual, Shutter	
6	Shutter	Auto/Manual (adjustment range 1/1s~1/30000s)	
7	WDR	120dB or better	
8	Camera Features	3D Noise Reduction, Defog, Image Stabilization, Corridor Mode, Image Mirror	
9	Video Compression	i. H.265/H.264 switchable ii. M-JPEG independent	
10	Max. Encoding Capacity	Mainstream: 2MP @25/30fps with H.265 Video Compression Sub Stream: 1MP @25/30fps with H.265 Video Compression Third Stream & Fourth Stream: VGA @10fps with H.265 Video Compression	
12	Motion Detection	Min. 4 motion detecting areas	
13	Privacy Mask	Min. 4 masks	
14	Internal Storage	Supports a Micro SD/SDHC/SDXC card (256GB or higher)	
15	Network Port	One RJ45 10/100M self-adaptive Ethernet port	
16	Alarm	1 alarm inputs / 1 alarm output	
17	Network Protocols	IPv4/IPv6, TCP/IP, UDP, IGMP, ICMP, DHCP, FTP, SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP	
18	Power Supply	PoE (IEEE 802.3af)/12VDC/24VAC	
19	Power	<13W	
20	Operating Temperature	0°C ~ 50°C	
21	Operating Humidity	0%~95% RH (non-condensing)	
22	Product Certifications	CE, FCC, IP67, IK10, BIS, STQC ER	

3. 2MP IP Dome Camera or higher

Sl. No.	Parameter	Specifications	Compliance (Yes/No)
1	Image Sensor	1/2.8" progressive scan CMOS or better	
2	Lens Configuration	Motorized zoom lens F1.6, f=2.7-13.5mm or better	
3	Night Vision Distance	Min. 40m	
4	Sensitivity	Color mode: 0.001 lux or better B/W mode: 0.001 lux or better	
5	Exposure	Auto, Manual, Shutter	
6	Shutter	Auto/Manual (adjustment range 1/1s~1/30000s)	
7	AGC	Auto/Manual	
8	WDR	120dB or better	
9	Camera Features	3D Noise Reduction, Defog, Image Stabilization, Corridor Mode, Image Mirror	
10	Video Compression	i. H.265/H.264 switchable ii. M-JPEG independent	
11	Max. Encoding Capacity	Mainstream: 2MP@25/30fps with H.265 Video Compression Sub Stream: 1MP@25/30fps with H.265 Video Compression Third Stream & Fourth Stream: VGA@10fps with H.265 Video Compression	
13	Motion Detection	Min. 4 motion detecting areas	
14	Privacy Mask	Min. 4 masks	

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15	Internal Storage	Supports a Micro SD/SDHC/SDXC card (256GB or higher)	
16	Network Port	One RJ45 10/100M self-adaptive Ethernet port	
17	Alarm	1 inputs / 1 output	
18	Network Protocols	IPv4/IPv6, TCP/IP, UDP, IGMP, ICMP, DHCP, FTP, SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP	
19	Power Supply	PoE (IEEE 802.3af)/12VDC/24VAC	
20	Power	<13W	
21	Operating Temperature	0°C ~ 60°C	
22	Operating Humidity	0%~95% RH (non-condensing)	
23	Product Certifications	CE, FCC, IP66, IK10, BIS, STQC ER	

4. Server For Video Management Software

Sl. No.	Parameter	Specifications	Compliance (Yes/No)
1	Form Factor	2U Rackmount with 800W 80 Plus Platinum Redundant Power Supply	
2	Processor	Dual Intel Xeon Silver 4214 Processor 12 Core (16.5M Cache, 2.20 Ghz)	
3	Chipset	Intel C621	
4	System Memory	i. Supported DIMM Quantity : 16 DIMM slots ii. Memory Capacity : 2 x 32GB DDR4 RDIMM 2666	
5	PCIe Expansion Slots	i. PCIe Slots, at least 4 must be x16 slots. ii. M.2 slot : 1 x (M key 2230/224/22260/2280, supports PCIe (x4) / SATA) iii. OCuLink : 3 (Slimline x8 from CPU1, OCuLink x4 from CPU1)	
6	SATA/SAS Storage	Drive Slots : 8 x 3.5" Hot swap + 2 x 2.5" Internal Drive Slots, populated with 2 x SATA 2.5" 6Gb/s SSD, 480GB	
7	Ethernet	i. Interface : Gigabit LAN 1000 Mb/s ii. Additional GbE Controller : 4 x RJ45 GLAN by Marvell 88E1543 1 x RJ45 Dedicated IPMI LAN port Supports Wake-On-LAN Supports Energy Efficient Ethernet 802.3az Supports Dual LAN with Teaming function Supports PXE LAN1 Supports NCSI	
8	Server Management	i. BMC Controller : ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 with Ikmv, vMedia support ii. IPMI Dedicated : 1 x Realtek RTL8211E for dedicated management GLAN iii. Features : Watch Dog, NMI	
9	Graphics	i. Controller : ASPEED AST2500 ii. VRAM : DDR4 16MB	
10	Rear I/O	i. UID Button/LED : 1 UID w/ LED ii. VGA Port : 1 x D-Sub iii. Serial Port : 1 x COM port iv. USB 3.2 Gen1 Port : 4 Type-A (USB3.2 Gen1) v. RJ45: 4 RJ45 (1GbE) must be onboard, no pcie based card acceptable vi. Dedicate LAN : 1 dedicated IPMI	
11	System BIOS	i. BIOS Type : 128Mb AMI UEFI Legal BIOS ii. BIOS Features : Plug and Play (PnP) ACPI 2.0 Compliance Wake Up Events SMBIOS 2.8 Support Instant Flash	
12	Hardware Monitor	i. Temperature : CPU Temperature Sensing System Temperature Sensing ii. Fan : CPU/Rear/Front Fan Tachometer CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) CPU/Rear/Front Fan Multi-Speed Control iii. Voltage : Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, 1.05V_PCH, +BAT, 3VSB, 5VSB	

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6. VMS (Video Management Software)		
Sl. No.	Specification	Compliance (Yes / No)
1	Mandatory Requirements <ul style="list-style-type: none"> i. Open Platform: VMS must be an open platform, compatible with third-party devices. ii. Brand Agnostic: VMS shall not be proprietary to any camera OEM. iii. ONVIF Compliance: VMS must support third-party ONVIF-compliant IP cameras. iv. Scalability: VMS shall allow expansion by adding ONVIF-compliant cameras and software licenses. v. Interoperability: VMS must ensure seamless integration with various third-party ONVIF cameras. 	
2	<ul style="list-style-type: none"> i. The Proposed VMS Software should be ONVIF S, G, T & M Profile Compliant & should be a Full Member of ONVIF. ii. The Declaration of ONVIF S,G,T & M Profile shall be available on ONVIF Official Website www.onvif.org in the Conformant Devices. iii. The Compliance/Conformance to the ONVIF Profile S, G, T and M should be available with the VMS OEM on or before the Date of Bid Publishing. 	
3	Video Network Manager uses fully expandable architecture; for managing videos from wide range of video sources and data generated by wide range of security devices.	
4	Network Video Manager shall use fully distributed architecture to avoid single point failure.	
5	Simultaneous Functioning: <ul style="list-style-type: none"> i. Recording, Alarms handling. ii. Live view, Camera control. iii. Map view, Playback. iv. Configuration and reports, Multiple monitor support. 	
6	Video Input: <ul style="list-style-type: none"> i. Should support for mega pixel cameras. Fixed cameras and PTZ cameras. ii. Should support MJPEG, MPEG4, H.264, H.265 formats and dual stream cameras & triple stream cameras. iii. Fully optimized video capture to minimize the bandwidth usage. iv. Flexible architecture to quickly integrate any new cameras. v. Auto search for IP video devices. Automatic restore of video connection. 	
7	Security: <ul style="list-style-type: none"> i. User configurable video resolution and framerate for each channel. ii. Multiple recording modes – continuous, scheduled, on alarm. Time lapse and Operator activated video recording. iii. Pre and post event recording, iv. Video overlay text. v. Available disk space and expected recording time indicators. vi. Recording history indicator. Watermarking on recorded video. vii. Network time server synchronization. viii. Should support Automatic hard disk recycling and RAID, Direct- attached Storage & Network-attached storage. Multiple drives selection. 	
8	Alarms: <ul style="list-style-type: none"> i. Network & Video loss, Network & Video recovery. ii. Low disk space, disk space recovery. 	
9	Live Video View: <ul style="list-style-type: none"> i. Tree view of cameras and sequences, Drag and drop camera selection. ii. Patrolling mode / video sequences, Multiple layout options combined with patrolling mode. iii. Page navigation within layout, Compact layout button. iv. Digital PTZ, Magnifying glass, Video overlay text. v. Bandwidth usage indicator. vi. Independent layout settings for each screen. 	

10	Camera Control: <ul style="list-style-type: none"> i. Camera PTZ, Presets and Tours. ii. USB Joystick and CCTV Keyboard support iii. Drag and drop camera selection 	
11	Map View: <ul style="list-style-type: none"> i. Dedicated map view screen ii. Tree view of cameras and sequences, JPEG / BMP map images iii. Camera / device indicators on map, Alarm indication on map iv. Live video display of multiple channels and sequences on map v. Video view state and camera indicator state for each camera vi. Device indicators display on the map vii. Alarm indicator on map, Digital PTZ for map, Map location presets 	
12	Reports and Logs: <ul style="list-style-type: none"> i. Session logs and alarms display ii. Session display iii. Detailed user logs / activity reports / system logs, Search user logs to generate reports iv. Report includes details like activity description, source IP address v. Search alarms based on alarm type, channel and time duration, vi. Alarms search to generate alarm reports vii. Alarm video display with video navigation controls viii. Quick access to multi-channel playback and video export associated with search results ix. Print logs and save in TXT, CSV or PDF formats, Print reports x. Save logs and reports in TXT, CSV or PDF formats xi. Automated daily reports saving and e-mailing xii. Automated daily reports xiii. Print images 	
13	Playback: <ul style="list-style-type: none"> i. Synchronized playback of multiple video channels, Recording history indicator ii. Video navigation - play, pause, up to 16X fast forward and up to 16X rewind iii. Time-lapse video playback mode iv. Time and Alarm based playback v. Tree view of cameras, Independent layout settings for each screen 	
14	Users and Privileges: <ul style="list-style-type: none"> i. Multiple user levels and privileges, Built in standard privileges ii. Ability to define custom privileges iii. Built in standard uses, Unlimited number of users can be added iv. Ability to associate / change privilege for any user, Ability to disable and delete a user v. Administrator control to change password for any user vi. User information like name, contact information etc. 	
15	Video Export: <ul style="list-style-type: none"> i. Video export based on time duration or alarm ii. Option for video overlay text on exported video iii. Standard format video export, exported video can be played in any standard media player like Windows Media Player iv. Native format video export with player application 	
16	User Interface: <ul style="list-style-type: none"> i. Multiple monitors and video walls support ii. Video thumbnail views iii. Full screen view of any video channel iv. Quick set up wizard for easy initial configuration v. All windows can be resized to custom sizes vi. Single click 'Fit to screen size' support for all windows vii. Recording status summary, Video channel availability summary, viii. Video analytics status summary ix. Simultaneous functioning of all features x. View video channels as a list or as thumbnails 	
17	Data Management: <ul style="list-style-type: none"> i. Archiving or deleting history data ii. Manual and Scheduled data clean up iii. Manual and Scheduled data archiving 	

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	<ul style="list-style-type: none"> iii. OEM shall provide a Declaration about the intellectual property rights & Source Code as a Documentary Evidence & Copyrights Certificate. iv. The OEM who is Claiming to be Make in India OEM with Local Content greater than 50%, then their Intellectual Property Rights (IPR) & Source Code must Reside in India only. Documentary Evidence to be Provided. v. Any False Declaration can lead to Bid Rejection. 	
26	<ul style="list-style-type: none"> i. The Offered Video Management Software (VMS) Application should be Indigenously Developed by the OEM & should not be White-labelled Product. ii. The VMS OEM to Submit a Copyright Certificate, along with a Self Declaration Stating the Proposed VMS Application is not White Labelled & is Indigenously Developed by the OEM themselves. iii. Any False Declaration shall lead to Bid Rejection. 	
	VMS Cyber Security Features	
27	<ul style="list-style-type: none"> i. The Proposed Video Management Software (VMS) Server Application (Thick Client) as well the VMS Web Client Application should have undergone Audit as per OWASP Top 10 Desktop Application Security Risks, OWASP Top 10 Web Application Security Risks & OWASP Source Code Review Testing Guide from STQC. ii. A Security Test Report/Certificate from STQC to be Submitted by the respective OEM to Substantiate the Proof of the Security testing. iii. All the Applications Desktop as well as Web Client Application must have already undergone the Security testing/Auditing on or before the Bid Publishing Date. iv. The Security testing Certificate from STQC must be Submitted as a Documentary Evidence/Proof. 	
28	<ul style="list-style-type: none"> i. The offered VMS must be cyber security certified with FIPS-140-2 & FIPS 140-3 encryption from Indian body for mitigating cyber security risk. ii. The FIPS 140-2 & FIPS 140-3 Certification should be done on or before the Bid Publishing Date. A Valid Certificate for FIPS 140-2 & FIPS 140-3 for the VMS Application to be Submitted as a Proof. 	
29	<ul style="list-style-type: none"> i. The Video Management Software should support RTSPS or SRTP or RTSP over TLS Encrypted Live Streaming from cameras (If Supported by Cameras) to VMS as well as support streaming of RTSPS or SRTP or RTSP over TLS Encrypted Live Streaming from VMS servers to clients. 	

7. Workstation for Live View

Sl. No.	Technical Specifications	Compliance (Yes/No)
1	CPU: Intel Core i7-13700K Processor 16 Core (30M Cache, up to 5.40 Ghz)	
2	Chipset : Intel® W680 Chipset	
3	Memory <ul style="list-style-type: none"> i. 4 x DIMM, Max. 128GB, DDR5 ECC and Non-ECC Un-buffered Memory ii. 1 x 16GB DDR5 UDIMM 5600 	
4	Graphics <ul style="list-style-type: none"> i. 1 x DisplayPort ii. 1 x HDMI® port iii. 1 x VGA port 	
5	Expansion Slots 2 x PCIe 5.0 x16 slots (support x16 or x8 / x8 mode) with 1 x Nvidia RTX A1000 8GB DDR6 Graphic Card	
6	Storage <ul style="list-style-type: none"> i. Total supports 3 x M.2 slots 2 x 3.5" + 2x2.5" drive slots. ii. 1 x PCIe 1TB NVMe M.2 	
7	Ethernet: 1 x Intel® 2.5Gb Ethernet	
8	USB WiFi & Bluetooth Adapter	
9	USB <ul style="list-style-type: none"> i. Rear USB (Total 8 ports) <ul style="list-style-type: none"> - 2 x USB 3.2 Gen 2 ports (1 x Type-A, 1 x Type-C®) - 4 x USB 3.2 Gen 1 ports (4 x Type-A) - 2 x USB 2.0 ports (2 x Type-A) ii. Front USB (Total 2 ports) 	

	iv. Video player application is available along with the archived data for reviewing archived data	
18	Client Application: <ul style="list-style-type: none"> i. Standard server-client architecture ii. Encrypted data communication between server and clients iii. Support for port forwarding to support far away / remote clients iv. Client software can be download from server URL v. Multi-site monitor - connect to multiple servers and view combined data vi. Ability to simultaneously view live and Playback videos from multiple servers vii. Automatic time synchronization between multiple connected server computers viii. Configuration to get live video streams from server or directly from cameras 	
19	24X7 Working: <ul style="list-style-type: none"> i. Watchdog to monitor application health ii. Automatic saving all settings including user interface settings iii. Automatic full system restore after unexpected events like power loss iv. Diagnostics parameters display v. Fully distributed architecture with no single-point failure vi. Automatic optimization option in server to lower resource usage, after the settings are done. 	
	Video Management Software (VMS) Pre-Qualification Criteria	
20	The Video Management Software (VMS) Application should be an Open Platform Application & should not be from the Same Camera OEM.	
21	<p>The Proposed VMS Software should be ONVIF S, G, T & M Profile Compliant & should be a Full Member of ONVIF.</p> <p>The Declaration of ONVIF S, G, T & M Profile shall be available on ONVIF Official Website www.onvif.org in the Conformant Devices.</p> <p>The Compliance/Conformance to the ONVIF Profile S, G, T and M should be available with the VMS OEM on or before the Date of Bid Publishing.</p>	
22	<p>The VMS OEM should have Certifications following certifications.</p> <ul style="list-style-type: none"> i. ISO 9001:2015 Quality Management Certifications in the name of the OEM ii. 27001:2013 Information Security Management Systems Certifications iii. ISO 14001:2015 – Environmental Management System iv. ISO 45001:2018 – Occupational Health & Safety Management System v. ISO 27017:2015 – Information Security Control for Cloud Services vi. ISO 90003:2018 – Software Engineering – Guidelines for the Application of ISO 9001:2015 to Computer Software. vii. ISO 27701:2019 - Security Techniques Extension to ISO 27001 for Privacy Information Management Requirement & Guidelines <p>The Above Certifications are the Minimum requirements to ensure Quality OEM Participation All of these Certificates to be Submitted by the OEM for Evaluation. These Certificates should be from The Video Management Software (VMS) Application OEM's with their Name & Address reflecting in the Certificates.</p>	
23	<ul style="list-style-type: none"> i. The VMS OEM should have Performed Benchmark Appraisal & Achieved CMMI V2.0 Maturity Level - 3. ii. Appraisal Certificate of CMMI V2.0 Level - 3 to be submitted as a Proof. iii. The OEM should be in the Possession of the Appraisal Certificate on or before the Bid Publishing Date. iv. The Appraisal shall be Validated Online & should be Available on Public Portal on CMMI Institutes Website in the Published Appraisal Results (https://cmmiinstitute.com/learning/appraisals/results). v. Any False Declarations shall lead to Bid Rejection & Blacklisting. 	
24	<ul style="list-style-type: none"> i. The VMS, Software OEM shall have a direct Registered Office & shall also have a Research & Development Center in India without any Collaboration, Joint Venture, Distributor, Parent Company & should be in Operational for the Last 10 Years as on the Last Date of Bid Submission. ii. The VMS OEM Should be in the Business of Video Management Software from last 10 years, OEM to Submit Purchase Order Copies to Substantiate the Proof. 	
25	<ul style="list-style-type: none"> i. The Intellectual Property Rights & Source Code of Offered Video Management Software (VMS) must not reside in a Country that is sharing Land Border with India. ii. The Video Management Software (VMS) Offered should not be Developed/ manufactured by an entity in which the majority shareholding of the entity is from a Country sharing a Land Border with India. 	

	<ul style="list-style-type: none"> iii. OEM shall provide a Declaration about the intellectual property rights & Source Code as a Documentary Evidence & Copyrights Certificate. iv. The OEM who is Claiming to be Make in India OEM with Local Content greater than 50%, then their Intellectual Property Rights (IPR) & Source Code must Reside in India only. Documentary Evidence to be Provided. v. Any False Declaration can lead to Bid Rejection. 	
26	<ul style="list-style-type: none"> i. The Offered Video Management Software (VMS) Application should be Indigenously Developed by the OEM & should not be White-labelled Product. ii. The VMS OEM to Submit a Copyright Certificate, along with a Self Declaration Stating the Proposed VMS Application is not White Labelled & is Indigenously Developed by the OEM themselves. iii. Any False Declaration shall lead to Bid Rejection. 	
	VMS Cyber Security Features	
27	<ul style="list-style-type: none"> i. The Proposed Video Management Software (VMS) Server Application (Thick Client) as well the VMS Web Client Application should have undergone Audit as per OWASP Top 10 Desktop Application Security Risks, OWASP Top 10 Web Application Security Risks & OWASP Source Code Review Testing Guide from STQC. ii. A Security Test Report/Certificate from STQC to be Submitted by the respective OEM to Substantiate the Proof of the Security testing. iii. All the Applications Desktop as well as Web Client Application must have already undergone the Security testing/Auditing on or before the Bid Publishing Date. iv. The Security testing Certificate from STQC must be Submitted as a Documentary Evidence/Proof. 	
28	<ul style="list-style-type: none"> i. The offered VMS must be cyber security certified with FIPS-140-2 & FIPS 140-3 encryption from Indian body for mitigating cyber security risk. ii. The FIPS 140-2 & FIPS 140-3 Certification should be done on or before the Bid Publishing Date. A Valid Certificate for FIPS 140-2 & FIPS 140-3 for the VMS Application to be Submitted as a Proof. 	
29	<ul style="list-style-type: none"> i. The Video Management Software should support RTSPS or SRTP or RTSP over TLS Encrypted Live Streaming from cameras (If Supported by Cameras) to VMS as well as support streaming of RTSPS or SRTP or RTSP over TLS Encrypted Live Streaming from VMS servers to clients. 	

7. Workstation for Live View

Sl. No.	Technical Specifications	Compliance (Yes/No)
1	CPU: Intel Core i7-13700K Processor 16 Core (30M Cache, up to 5.40 Ghz)	
2	Chipset : Intel® W680 Chipset	
3	Memory <ul style="list-style-type: none"> i. 4 x DIMM, Max. 128GB, DDR5 ECC and Non-ECC Un-buffered Memory ii. 1 x 16GB DDR5 UDIMM 5600 	
4	Graphics <ul style="list-style-type: none"> i. 1 x DisplayPort ii. 1 x HDMI® port iii. 1 x VGA port 	
5	Expansion Slots 2 x PCIe 5.0 x16 slots (support x16 or x8 / x8 mode) with 1 x Nvidia RTX A1000 8GB DDR6 Graphic Card	
6	Storage <ul style="list-style-type: none"> i. Total supports 3 x M.2 slots 2 x 3.5" + 2x2.5" drive slots. ii. 1 x PCIe 1TB NVMe M.2 	
7	Ethernet: 1 x Intel® 2.5Gb Ethernet	
8	USB WiFi & Bluetooth Adapter	
9	USB <ul style="list-style-type: none"> i. Rear USB (Total 8 ports) <ul style="list-style-type: none"> - 2 x USB 3.2 Gen 2 ports (1 x Type-A, 1 x Type-C®) - 4 x USB 3.2 Gen 1 ports (4 x Type-A) - 2 x USB 2.0 ports (2 x Type-A) ii. Front USB (Total 2 ports) 	

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	iii. - 2 x USB 2.0 ports	
10	Audio i. Realtek 7.1 Surround Sound High Definition Audio CODEC - Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking ii. - Supports up to 24-Bit/192 kHz playback"	
11	Audio Features i. Audio Shielding ii. Premium audio capacitors iii. Dedicated audio PCB layers iv. - Unique de-pop circuit	
12	Back Panel I/O Ports i. -2 x USB 3.2 Gen 2 ports (1 x Type-A, 1 x Type-C®) ii. -4 x USB 3.2 Gen 1 ports (4 x Type-A) iii. -2 x USB 2.0 ports (2 x Type-A) iv. -1 x DisplayPort v. -1 x HDMI® port vi. -1 x VGA port vii. -2 x Intel® 2.5Gb Ethernet ports viii. -5 x Audio jacks ix. -1 x BIOS Flashback™ button	
13	Special Features i. 5X PROTECTION III ii. DIGI+ VRM (- Digital power design with DrMOS) iii. ESD Guards iv. LAN Guard v. Overvoltage Protection vi. SafeSlot vii.- Stainless-Steel Back I/O	
14	BIOS: 256 Mb Flash ROM, UEFI AMI BIOS	
15	Manageability : WOL by PME, PXE	
16	Form Factor : Tower	
17	Cooling: System should support 3x140mm in front, 3x120mm on top and 1x140 at rear fans.	
18	Power Supply : 650W Gold	
19	Operating System : Windows 11 Professional 64 bit	
20	Wireless Standard USB K/M	
21	Certifications : BIS, QCI, ISO 9001, 14001, 27001	
22	Warranty : 3 Years Standard	

8. KVM Switch with LCD Console

Sl. No.	Technical Specification	Compliance (Yes/No)
1	Proposed 18.5" LCD console tray and 8 port IP KVM switch should be built in design and should occupy 1U space together in 19" standard rack.	
2	It should have cable management arm (CMA) and the 8x RJ45 port KVM switch built in at the rear side of the LCD console tray to save the U space in Rack.	
3	Both LCD console tray and the built-in KVM switch should have separate power supply.	
4	Vendor should supply 8 number of KVM cables with VGA, USB connectors.	
5	KVM should have LEDs to indicate Power connection status.	

6	Built-in KVM switch should have 8 RJ45 port to connect KVM cable/dongle with CAT cable to extension at least up to 30Mt	
7	Supplied KVM cables should support Virtual media to map USB media devices to target servers remotely over TCP/IP and Smart Card (CAC).	
8	Built it KVM switch should have encryption 128-bit AES for keyboard, mouse and video signals and virtual media sessions, internal and LDAP external authentication.	
9	KVM Session should support Keyboard pass-through.	
10	Built-in KVM switch should be cascaded with another KVM switch with max 30Mt CAT cable and should have one local console port.	
11	Built-in KVM switch should not have power on/off switch to avoid accidental and unnoticed power off.	
12	LCD display should support brightness 250 cd /m2, contract ratio 1000:1 and 16.7million colours.	
13	LCD console tray and built in KVM switch should support max resolution 1600 x 1200 at 60 Hz.	
14	Operating temperature and Humidity of LCD console tray should be 0°C to 50°C and 10% to 80%	
15	LCD console tray should have 103 keypad with number-pad and touchpad.	
16	It should have control buttons on the front of the monitor to adjust the characteristics of the image that is displayed two independent USB 2.0 compliant pass-through ports at front side.	
17	LCD console tray should be global certified by most of the agencies like UL, CE, CCC, BSMI, EAC, VCCI, KCC, FCC Class A	

9. 55" Display for Live View of Cameras

Sl. No.	Section	Feature	Specification	Compliance (Yes/No)
1	Panel	Screen Size	55" or higher	
2		Panel Technology	IPS or VA	
3		Aspect Ratio	16:09	
4		Native Resolution	3,840 x 2,160 (UHD)	
5		Backlight Unit Type	Edge	
6		Brightness (cd/m2)	500nit or higher	
7		Dynamic Contrast Ratio	10,00,000:1 or higher	
8		Viewing Angle (H x V)	178 x 178 or higher	
9		Response Time	8ms (G to G) or better	
10		Surface Treatment (Haze)	Haze 28% or better	
11		Dynamic CR	1,000,000:1 or higher	
12		Operation Hours	24 x 7 Hrs	
13		Orientation	Landscape & Portrait	
14	Connectivity	Input	Minimum 3 x HDMI, DP, DVI-D, Audio and 2 x USB	
15		Output	HDMI/DP, Audio	
16		External Control	RS232C In/out, RJ45 (LAN) In, IR In	
17	Mechanical	Bezel Colour	Black	
18	Specification	VESA	300 x 300 or as per OEM	
19	Environmental	Operation Temperature	0°C to 40°C or better	
20	Conditions	Operation Humidity	10% to 80%	

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21	Power	Power Supply	100-240V~, 50/60Hz	
22		Power Type	Built-In Power	
23		Consumption: Smart Energy Saving / Max.	110W / 150W or better	
24	Software	Content Management Software	Required	
25	Compatibility	Control and Monitoring Software	Required	
26	Certification	Safety	CB	
27		EMC	FCC Class "A" / CE / KC	
28		ErP / Energy Star	Yes / Yes	
29	Special Feature	Tilt (Facedown)	Max. 15°	
30		IP Rating	IP5x	
31	Warranty		3 Years	

10. Video Wall with Accessories

Sl. No.	Section	Item Description	Required Specification	Compliance (Yes/No)
1	Panel	Monitor Type	LED	
		Panel Technology	IPS	
		Monitor Size	55" diagonally or higher	
		Aspect Ratio	(16:9)	
		Native Resolution	1,920 x 1,080 (Full HD)	
		Brightness	500 cd/m2 or higher	
		Contrast Ratio	1,200 : 1	
		Response Time	8ms or less	
		Viewing Angle (H x V)	178 x 178 degree	
		Lifetime [Typ]	60000 Hours	
		Operation Hour	24 hours a day	
		Orientation	Portrait & Landscape both	
2	Connectivity	Inputs	HDMI-2 nos, DVI-D, DP , Audio, RGB, SRC, USB 2.0 & RJ45	
		Outputs	DP, Audio & RJ45	
		External Control	RS232C, RJ45, IR Receiver	
3	Physical Specification	Bezel Width	Less than 0.45 mm even (L/T/R/B)	
4	Power	Power Supply	100-240V~, 50/60Hz	
		Power Consumption (Typ)	190W or less	
		Smart Energy Saving	110W or more	
5	Industrial Grade Standard / Certification	Safety	IEC-60950-1, EN-60950-1, UL-60950-1	
		EMC	FCC Class "A" / CE / KCC	
		Energy Star	Energy Star 7.0 or better	
6	Features	At least 15x15 Tile Mode, USB Playback, Smart Energy Saving, Temp Sensor, 8GB total Internal Memory, Content Scheduling, Fail Over, Wake on LAN, with external 2.1ch 300W Sound Bar of the same OEM with Wireless Subwoofer		
5M HDMI Cable				
7	Crystal-clear video up to 4K DCI (4096 x 2160 @ 30Hz), 4K UHD (3840 x 2160 @ 30Hz), and 1080p @ 60Hz signal			
8	HDMI Ethernet Channel functionality: additional dedicated data channel supports networking			

9	HDMI (3D, Deep Color, 4K) and HDCP 2.2 compatible	
10	Gold-plated connectors for reliable transmissions	
11	5 mtrs in Length & RoHS Compliant	
UHD+ 8x8 HDMI Matrix		
12	<ul style="list-style-type: none"> i. Supply of UHD+ 8x8 HDMI Matrix with Audio Output with HDMI 8 input and 8 output with 18Gbps (600MHz) 4K UHD support. Supports HD resolutions up to 3840x2160@60 Hz (YUV 4:4:4, 8-bit) & 4096x2160@60 Hz (YUV 4:4:4, 8-bit). DVI 1.0 compliant with the use of an HDMI-DVI adaptor. ii. Supports 16-bit Deep Colour up to 1080p 60. iii. Supports pass-through of LPCM 7.1, bitstream and HD bitstream audio formats. iv. Supports six internal EDIDs, four external EDIDs copied from connected devices, and four user provided EDIDs, Eight Audio output ports should be there which can pair with eight HDMI outputs individually. v. OSD with user customizable information text. vi. Intuitive control interface including telnet, WebGUI, OSD, IR remote and RS-232. 	

11. 24 Port PoE Switch with 2 x 10G SFP+ Port

Sl. No.	Specification	Compliance (Yes/No)
1	1RU 24 x 10/100/1000Base-T PoE+ ports with 4 x 1/10G SFP+ ports, 370W PoE Budget or higher, Dual AC/DC Power Supply from day one. Should be populated with 2 nos. of 1G SM SFP and 2 nos. of 10G SFP+ SM module from day 1.	
2	General Specification: <ul style="list-style-type: none"> i. Minimum 128 Gbps Switching Bandwidth & 95 Mpps Forwarding Bandwidth ii. Minimum 16K MAC, minimum 1K Access Control Entries, minimum 9K Jumbo Frame and minimum 1K IGMP groups. iii. Switch should support High Availability (HA) features like Stacking/VCS/VSS/virtual chassis technology or equivalent technology with minimum throughput of 80 Gbps. The HA feature should include up to 4 switches in a single logical unit. For Virtual Chassis/ Stacking of the switches, Dedicated Ports or additional 2 no's 10G SFP+ slots should be available from Day-1 to be utilized. 	
3	Layer - 2 Features: <ul style="list-style-type: none"> i. Should support STP/RSTP/MSTP mode and Ethernet Ring Protection Switching (ERPS) (ITU-T G.8032) or equivalent ii. Should support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1ab, 802.3ad, 802.3ah, IGMP snooping v1, v2 and v3, LLDP/LLDP-MED, Unidirectional Link Detection (UDLD) or equivalent, Multicast VLAN Registration or equivalent, ARP, Private VLAN iii. Should support BPDU filtering & Spanning-Tree Root Guard (STRG) 	
4	Layer 3 Routing: <ul style="list-style-type: none"> i. Should support Static Routing for IPv4 & IPv6, RIPv1/RIPv2, OSPFv2 and OSPFv3 ii. Should support Dynamic Host Configuration Protocol (DHCP) client and Relay iii. Should support Proxy ARP to allow normal ARP operation between subnets iv. Should support minimum 900 nos. of routes 	
5	QoS Features: <ul style="list-style-type: none"> i. Should have per-port broadcast, multicast, and unicast storm control. ii. Should support standard 802.1p CoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, source and destination MAC address or Layer 4 TCP or User Datagram Protocol (UDP) port number. iii. Should support QoS Flow Actions, Remark 802.1p priority tag, TOS/DSCP tag, Bandwidth Control and Three Colour Marker or equivalent. iv. Should support no performance penalty for highly granular QoS functions. v. Should support minimum four egress queues per port to enable differentiated management of up to four traffic types. 	

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	vi. There shall be support for Asynchronous data flows upstream and downstream from the end station or on the uplink using ingress policing and egress shaping. vii. Should support L2/L3/L4 QoS/CoS solutions help ensure that critical network services such as VoIP, ERP, Intranet, and video conferencing are served with proper priority.	
6	Network Security Features: i. Should support IEEE 802.1x to allow dynamic, port-based security, providing user authentication and Admission Control features ii. Should support port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on individual switch ports. It shall also support VLAN based filters. iii. Should support MAC filtering, SSHv2, SNMPv3, DHCP snooping, Port Security or equivalent, MAC address notification, RADIUS, Port Mirroring or equivalent, IGMP filtering, Unknown unicast and multicast port blocking iv. It shall support multilevel security on console access to prevent unauthorized users from altering the switch configuration.	
7	Management i. It shall have support for RMON groups through the use of a mirrored port, which permits traffic monitoring of a single port, a group of ports, or the entire switch from a single network analyzer or RMON probe. ii. It shall support Simple Network Time Protocol/Network Timing Protocol (SNTP/NTP) to provide an accurate and consistent timestamp to all intranet switches. iii. It shall support RMON v1 and v2, SNMPv1/v2c/v3, Telnet, Web, CLI, Dying Gasp or equivalent iv. It shall support IPV6 management. ACL and QoS and IPV6 Neighbour Discovery. v. All Gigabit Ethernet ports should design to meet IEC 61000-4-5 surge protection (6kV). (External/Internal)	

12. 24 Port PoE Switch with 4 x 10G SFP+ Port

Sl. No.	Specification	Compliance (Yes/No)
1	1RU 24 x 10/100/1000Base-T PoE+ ports with 4 x 1/10G SFP+ ports, 370W PoE Budget or higher, Dual AC/DC Power Supply from day one. Should be populated with 4 nos. of 10G SM SFP+ modules to be populated from day1.	
2	General Specification: i. Minimum 128 Gbps Switching Bandwidth & 95 Mpps Forwarding Bandwidth ii. Minimum 16K MAC, minimum 1K Access Control Entries, minimum 9K Jumbo Frame and minimum 1K IGMP groups. iii. Switch should support High Availability (HA) features like Stacking/VCS/VSS/virtual chassis technology or equivalent technology with minimum throughput of 80 Gbps. The HA feature should include up to 4 switches in a single logical unit. For Virtual Chassis/ Stacking of the switches, Dedicated Ports or additional 2 no's 10G SFP+ slots should be available from Day-1 to be utilized.	
3	Layer - 2 Features: i. Should support STP/RSTP/MSTP mode and Ethernet Ring Protection Switching (ERPS) (ITU-T G.8032) or equivalent. ii. Should support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1ab, 802.3ad, 802.3ah, IGMP snooping v1, v2 and v3, LLDP/LLDP-MED, Unidirectional Link Detection (UDLD) or equivalent, Multicast VLAN Registration or equivalent, ARP, Private VLAN iii. Should support BPDU filtering & Spanning-Tree Root Guard (STRG)	
4	Layer 3 Routing: i. Should support Static Routing for IPv4 & IPv6, RIPv1/RIPv2, OSPFv2 and OSPFv3 ii. Should support Dynamic Host Configuration Protocol (DHCP) client and Relay iii. Should support Proxy ARP to allow normal ARP operation between subnets	

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	iv. Should support minimum 900 nos. of routes	
5	QoS Features: <ul style="list-style-type: none"> i. Should have per-port broadcast, multicast, and unicast storm control. ii. Should support standard 802.1p CoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, source and destination MAC address, or Layer 4 TCP or User Datagram Protocol (UDP) port number. iii. Should support QoS Flow Actions, Remark 802.1p priority tag, TOS/DSCP tag, Bandwidth Control and Three Color Marker or equivalent. iv. Should support no performance penalty for highly granular QoS functions. v. Should support minimum four egress queues per port to enable differentiated management of up to four traffic types. vi. There shall be support for Asynchronous data flows upstream and downstream from the end station or on the uplink using ingress policing and egress shaping. vii. Should support L2/L3/L4 QoS/CoS solutions help ensure that critical network services such as VoIP, ERP, Intranet, and video conferencing are served with proper priority. 	
6	Network Security Features: <ul style="list-style-type: none"> i. Should support IEEE 802.1x to allow dynamic, port-based security, providing user authentication and Admission Control features ii. Should support port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on individual switch ports. It shall also support VLAN based filters. iii. Should support MAC filtering, SSHv2, SNMPv3, DHCP snooping, Port Security or equivalent, MAC address notification, RADIUS, Port Mirroring or equivalent, IGMP filtering, Unknown unicast and multicast port blocking iv. It shall support multilevel security on console access to prevent unauthorized users from altering the switch configuration. 	
7	Management <ul style="list-style-type: none"> i. It shall have support for RMON groups through the use of a mirrored port, which permits traffic monitoring of a single port, a group of ports, or the entire switch from a single network analyzer or RMON probe. ii. It shall support Simple Network Time Protocol/Network Timing Protocol (SNTP/NTP) to provide an accurate and consistent timestamp to all intranet switches. iii. It shall support RMON v1 and v2, SNMPv1/v2c/v3, Telnet, Web, CLI, Dying Gasp or equivalent iv. It shall support IPV6 management. ACL and QoS and IPV6 Neighbour Discovery. v. All Gigabit Ethernet ports should design to meet IEC 61000-4-5 surge protection (6kV). (External/Internal) 	

13. 8 Port Gigabit PoE Switch

Sl. No.	Specification	Compliance (Yes/No)
1.	1RU 8 x 10/100/1000BASE-T PoE+ with 2 x 1G SFP ports, minimum 120W power budget, AC/DC Power Supply. Should be populated with 2 nos. of 1G SM SFP Transceiver from day1.	
2.	Should Support minimum 20 Gbps Switching Capacity and Forwarding Rate of 14.88 MPPS address table.	
3.	Should Support IGMP Snooping v1, v2, MLD snooping v1/v2,	
4.	Switch Should support ACL Policy based on MAC, VLAN, IPv4, IPv6 & ports.	
5.	Should Support minimum 8K MAC, 4K VLAN ID's, Voice VLAN, Port Mirroring	
6.	Should support LACP, STP/RSTP/MSTP, Ethernet Ring Protection Switching (ERPS) (ITU-T G.8032) or equivalent and LLDP.	
7.	Should support security protocol storm-control-broadcast/ multicast/unicast, Port isolation, Port security, IP source guard, IP+MAC+Port binding	

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8.	Should support Quality of Service (QoS), 802.1p, Strict, Weighted Round Robin (WRR) or equivalent, Bandwidth Control.	
9.	Should Support IP interfaces, Static routing for inter-VLAN Communication	
10.	Management to support Telnet, Web, SNMP, TFTP and CLI	
11.	Should be supplied with all necessary components	
12.	Operating Temperature 0 to 45 °C	

14. 4 Port Industrial PoE Switch

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Port Density & Redundancy	Should have 4 x 10/100/1000 Mbps PoE ports with and 2x1GSFP Ports. RJ45 Console Port. Power Budget Min 60Watt from Day one. Should populated with 2 nos. of 1G SM SFP from day1.	
2	Performance	MAC Address: 8K or higher; VLAN: 4K or higher; Switching capacity: 12 Gbps or higher; Forwarding Rate: 8.9 Mpps or higher;	
3	VLAN	VLAN, Voice VLAN and Q in Q. GVRP	
4	Quality of Service	Should support Egress rate limiting, eight egress queues per port, DSCP -based QoS, IEEE802.1p Class of Service	
5	Multicast support	IGMP Snooping, MLD snooping.	
6	Management	SNMP V1, V2, V3, Web GUI, CLI, USB, IPv6 management feature on open standards,	
7	Dual Stack	IPv4 as well as IPv6 required.	
8	Security	Should support Access Control Lists (ACLs), DHCP snooping, IEEE802.1x based port authentication, RADIUS, TACACS, SSH, port mirroring, NTP	
9	Ring Protection	IEEE802.1S, IEEE802.1W, IEEE802.1D, BPDU, Root guard, ITU-T G.8032 ERPS or equivalent for faster convergence.	
10	Enclosure Rating	IP 30 or equivalent Industrial Grade Rating (to be housed in Junction box)	
11	Power Supply	Industrial Power adapter from same OEM is preferred.	
12	Operating Temperature	-10 to +65 degree centigrade	
13	OEM should confirm and Switch should comply	IP30, IEC/EN60950-1, EN55024, EN61000-3-2; EN61000-3-3, EN61000-4-2; EN61000-4-3, EN61000-4-4; EN61000-4-5; EN61000-4-6 IEC /EN 60068-2-27, IEC /EN 60068-2-32;	
14	OEM should have ISO 9001:2015, ISO 14001:2015, CE, FCC and RoHS.		

15. 6 Core Optical Fiber Cable

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Cable Type	6 fibre Single Mode, Armoured, Unitube, Gel filled cable complying to ISO.IEC 11801 - 2nd Edition, type OS2; AS/ACIF S008; AS/NZS 3080, ITU-T REC G 652D,AS/NZS 3080; IEC 60332-1; suitable for use in direct burial, outdoor ducts and backbone cabling.	
2	Armour	Corrugated Steel Tape Armour -Thickness > 0.125mm	
3	Water Blocking	Thixotropic Gel (Tube), Petroleum Jelly (Interstices)	

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4	Attenuation	@ 1310nm \leq 0.35 db/Km MAX	
		@1550nm \leq 0.22 db/Km MAX	
5	Numerical Aperture	0.14	
6	Attenuation Discontinuity	Both Windows $<$ 0.10dB	
7	Core/Mode- Field (um)	9	
8	Clad Diameter (um)	125 + - 1	
9	Coat Diameter	245 + - 10	
10	Loose tube material	Single PBTP Loose tube filled with water blocking Thixotropic gel	
11	Jacket material	UV Stabilised Polyethylene (HDPE)	
12	Peripheral Strength Member	Two Steel wires / Armed Yarns	
13	Tensile Strength	1000N	
14	Crush Resistance	2000N/10 cm	
15	Cable Diameter	9.8 + - 0.5 mm	
16	Max. Bending Radius (during installation)	20 X Overall diameter	
17	Max. Bending Radius (during full load)	10 X Overall diameter	
18	Warranty	5 Years	

16. 24 Port Optical Fiber LIU			
Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Fiber Management Shelf	i. Configurable Fibre drawer is a 1U rack mount unit for storing and terminating incoming fibre cable. ii. Configurable. Fits up to four 6 Pak Plates/ Angled 6 Pak plates iii. Management rings within system to accommodate excess fibre cordage behind the trough adapters and maintain fibre bend radius iv. Sliding drawer for ease of reconfiguring fibres v. Rugged steel construction finished in attractive vi. Accommodates 2 x 12 fibre Splice Trays	
2	Optical Fibre Adapter Plates Loaded	SC Duplex Fibre SM Plate	
3	No of Adapter Plate Required	24	
4	Pigtail	SC, Single Mode, 9/125 μ m should have LSZH	
5	No of Pigtail Required	24	
6	Warranty	5 Years	






17. 12 Port Optical Fiber LIU

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Fiber Management Shelf	i. Configurable Fibre drawer is a 1U rack mount unit for storing and terminating incoming fibre cable. ii. Configurable. Fits up to four 6 Pak Plates/ Angled 6 Pak plates iii. Management rings within system to accommodate excess fibre cordage behind the trough adapters and maintain fibre bend radius iv. Sliding drawer for ease of reconfiguring fibres v. Rugged steel construction finished in attractive vi. Accommodates 2 x 12 fibre Splice Trays	
2	Optical Fibre Adapter Plates Loaded	SC Duplex Fibre SM Plate	
3	No of Adapter Plate Required	12	
4	Pigtail	SC, Single Mode, 9/125 μ m should have LSZH	
5	No of Pigtail Required	12	

18. Optical Fiber Patch Cord

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Type	SC to LC Duplex tuned Fiber Optic Patch Cord 1 Mtr, 9/125 Micron	
2	Cable Sheath	LSZH	
3	Cable Diameter	1.8 mm twin zip	
4	Ferrule	Ceramic	
5	Buffer	Tight buffered	
6	Insertion Loss	MAX .3 dB	
7	Return Loss	> 45 dB	
8	ROHS	ROHS Compliant	

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19. Cat 6 UTP Cable			
Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Type	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-B.2-1 Additional Transmission Performance Specifications for 4-pair Category 6 Cabling. The Cable should be tested by	
		third party up to 700 MHz and report should be submitted along with bid.	
		Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.	
		Supports ultrahigh speed data networks such as Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and beyond.	
2	Jacket	Jacket LSZH and Should comply to LSZH 332.1, IEC 60754-2 and IEC 61034-2	
		Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation.	
3	Mechanical Characteristics	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted. Conductor Solid Copper, Conductor Diameter	
		0.56±0.005mm (23 AWG) Insulator Polyolefin Outer Diameter 6.0±0.4mm Max. Temperature 75°C	
4	ROHS/ELV	Compliant	
5	ETL Certificate @700 MHz	Cat6 Cable should have test by ETL @700 MHz, TEST report should be submitted along with bid.	

20. Cat6 STP Cable			
Sl. No.	Feature	Requirement	Compliance (Yes/No)
1	Type	Cat 6 SF/UTP 4 Pair cable has been designed to support high speed data transmission systems. The cable is part of the Cat 6 SF/UTP range of products that are designed to support a growing requirement for shielded cabling systems.	
2	Jacket:	LSZH	
3	Mechanical Characteristics	Conductor Size: 23 AWG	
		Primary Insulation: High Density Polyethylene	
		Nominal O.D.: 1.09mm	
		Shield: Aluminium / Polyester Foil	
		Tinned Copper Braiding	
		with Min. 40% coverage	
		Sheath Type: LSZH/PVC (60332.1)	
		Sheath colour Violet	
4	ROHS/ELV	Nominal O.D: 7.2mm +/-0.4mm	
		Operating Temperature: -20° to +70°	

		NVP: 76%	
		Bending radius: 8 x Cable dia	
		-20°C ± 1°C	
		Maximum Pulling Force: 11.5 Kg	
		Compliant	
5	Standard	ANSI/TIA-568-C.2. & ISO/IEC 11801	
		Ed. 2.0	
		UL 1581 VW1, EN0256-2-1	
6	Electrical Characteristics	D.C. Resistance: ≤9.38 ohm/100m	
		DC Resistance Unbalance: 5% max	
		Characteristic Impedance: 100 ± 15 Ω	
		Mutual Capacitance: < 5.6nF/100m	
		Capacitance Unbalance: 330pF/100m	
		Delay Skew: < 45nS	

21. Cat 6 UTP Patch Panel

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Type	19" 24-port, loaded with Jack, A key product used in both Category 6 link and channel gigabit Ethernet applications. The IDC section consists of V-shaped contacts that flex not fatigue when terminated. Each port features spring- loaded shutter and can be colour coded to match jack outlets. Offering both front and rear labelling options, the patch panel is constructed of cold-rolled steel for additional strength and durability. All I/O port should have shutter.	
2	Ports	24	
3	Plastic Housing Jack Connector	Polycarbonate, UL94V-0 rated or equivalent	
4	Contact Plating	50μ" Gold/100μ" Nickel	
5	Front Connector interface	RJ45	
6	Circuit Identification Scheme	Icons on each of 24-ports	
7	Port Identification	9mm or 12mm Labels on each of 24- ports (to be included in supply)	
8	Height 1U	1.75 inches	
9	ROHS/ELV	Compliant	



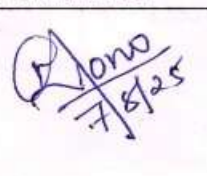
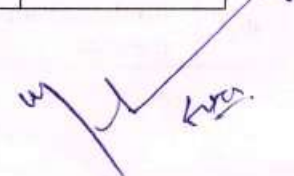
22. Cat6 UTP Patch Cord – 1 Mtr.

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Type	Cat 6 U/UTP Patch Cords are key components of Cat 6 U/UTP End-to-End Solution and are designed to support data networks for 10/100BASE-T and 1000BASE-T applications.	
2	Conductor	24 AWG stranded copper wire	
3	Length	1 Meter	
4	RJ45 plug and boot material	Clear polycarbonate	

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5	Outer Sheath	LSZH	
6	RJ45 plug dimensions compliant with	ISO/IEC 60603-7-4 and FCC 47 Part 68	
7	Contact material	0.35mm thick copper alloy	
8	MIN operating life	750 insertion cycles	
9	Sheath Material	LSZH	
10	ROHS/ELV	Compliant	

23. 42U Floor Mount Rack			
Sl. No	Feature	Requirement	Compliance (Yes/No)
1	Basic Structure	i. Rack should be of All Steel Construction with powder coated finish. ii. Rack design should enable shipping of the rack in (CKD) Completely Knock Down condition and it should permit an easy assembly of the racks at site as per the requirement at site. iii. All the components should be positively fastened for smooth usage of structure. Construction of all direct load bearing structural members like Frames, Plinth and Vertical Mounting rails should not be less than 2.0mm CRCA Steel. iv. Integral Plinth should have provision for Cable Entry on rear and two sides with minimum opening of this top gland plate on the plinth should be at least 300mm x 300mm with separate opening for electrical / power cables entry. v. The Steel used should be high grade CRCA.	
2	Plinth & Castors	The plinth should have provision to mount castors 4 Nos. and Levelling Feet – 4 Nos. simultaneously.	
3	Front Door	Front door – Front Perforated/Glass Door with dual Cam Lock for security purpose. This door should have provision to get mounted on Right or Left side of the rack front. It should be possible to change the door configuration from Left to Right. It should also be possible to open this door by 180 Degrees to ensure proper approach to front of rack.	
4	Rear Door	Rear door should be completely perforated to facilitate the air circulation at the maximum without offering any resistance to the same. It should be possible to remove it easily and should have centre handle lock for the security purpose.	
5	Side panel	Side Panels should be easily removable type along with the provision for locking. The panels should have latching arrangement to facilitate easy removal and putting back the panel along with locks for the security purpose.	
6	Space	Height - The Rack should Provide 42U Usable Space.	
		Width - The rack should be 800mmW with 19" mounting provision	
		Depth - The rack should be at least 1000mmD. Usable Depth should be not less than 970mm	
7	Load Bearing Capacity	Load carrying capacity of rack should be 1000 Kg.	
8	Mounting Provisions	Mounting rails (for Standard 19" mounting) should be made up of steel. (Minimum 2.0mm thickness) and should be of multi-fold	

		design for enhanced loading capacity and rigidity. It should have unique U Marking along with U locator notch. U Number Markings should be clearly visible even after mounting of the equipment.	
9	Cable Management	1U Cable Managers to be supplied. Each Rack should have 2Nos of Horizontal Cable Managers 100MM Vertical Reducers should be provided. Each Rack Should have 2Pair of Vertical Reducing Channel. Each Rack should have 1Pair of 100MM of Vertical Cable basket mounted at the rear side of the rack.	
10	Heat Management	Top roof should be well ventilated, especially with ventilation provided on the vertical side of the roof. This will greatly enhance the hot air outflow while in operation. Roof should also have provision to mount the cooling fan trays. It should be possible to mount at least 4 nos. of 90 CFM cooling fans on this roof and in addition there should be space for the cable entry from the top.	
11	Powder Coating Details	Thickness of powder coating minimum 60 microns or more.	
12	Thickness of Material	The structure and all its components should be made from CRCA Steel Material – at least 1.2mm thick	
13	Shelving Options	The rack should be provided with 1 Heavy Duty Shelf of 800mmD	
14	Power Management	Vertical mounting 12 Indian Socket 5/15A with minimum 3mtr cable with plug top – 2 Nos.	
16	ISO Certifications	OEM should have 9001:2008, ISO Certifications. OEM should have IATF or equivalent Certifications	







24. 12U Wall Mount Rack with Standard Accessories

Sl. No.	Feature	Requirement	Compliance (Yes/No)
1	Basic Structure	Basic structure of CRCA Steel with top, bottom and side frame. Wall Mount should be able to be shipped in Flat Pack (CKD)	
2	Front Door	Front Glass Door with lock – should be easily removable type. Door should be able to be changed at site for left side / right side opening as per site conditions.	
3	Side Panels	Side panels should be vented.	
4	Space	Height - It Should Provide 12U Usable Space.	
		Width – It should be 600mmW with 19" mounting provision	
		Depth – IT should be at least 600mm.	
5	Load Bearing Capacity	It should be able to take load of minimum 50Kg.	
6	Wall Mounting	Provision for easy wall mounting should be there with appropriate anchor fasteners	
	Cable Management	Horizontal cable manager in 1U format with Nylon / PVC cable hoops to be provided.	
8	Heat Management	Rack must be provided with one fan directly mounted on the rooftop as an exhaust from the cabinet. Fan should be of AC 230V with flow volume of at least 90 CFM. Rack should have dual Fan Mounting provision.	
9	Powder Coating Details	Thickness of powder coating should be minimum 60 microns or more.	


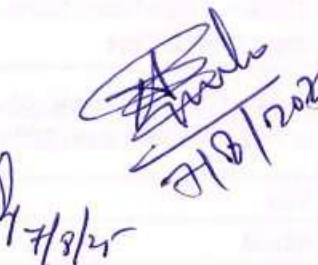
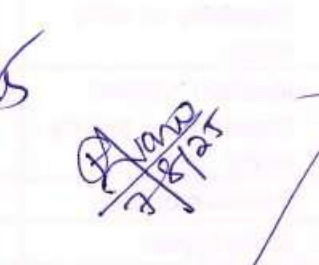
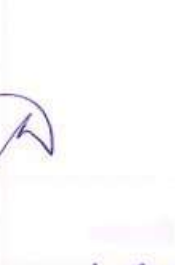
10	Thickness of Material	i. Wall Mount structure and all its components should be made from CRCA Steel Material – at least 1.2mm thick. ii. Mounting rails (2 Pairs) be made from CRCA Steel Material at least 1.5mm thick	
11	Power Management	Rack should have horizontally mounted power strip with 6 sockets of Indian 5A type combination sockets and 15A Indian type plug – 2 Nos.	
12	Certifications	OEM should have 9001:2008, 14001:2004 and 18001:2007 ISO Certifications	

25. 6U Wall Mount Network Rack

Sl. No	Specification	Compliance (Yes/No)
1	Cabinet should be 6U Height 600mmWidth 500mmDepth with Wall Mounting brackets, 2 on LHS and 2 on RHS.	
2	Standards, Basic structure of CRCA Steel (IS 513 Gr D Thickness ± 1 mm), Side Integrated Single Section.	
3	Wall mountable cable entry provision at the top and bottom	
4	19" Recess mounting angles – 2 Pairs	
5	Corrosion Resistance Salt spray test according to ISO 9227	
6	UL approved product as per UL 2416., ISO 9001:2015 & ISO 14001:2015	
7	DIN 41494 Standard Epoxy polyester powder coating 60–80-micron thickness, Colour- Pastel Fine Texture	
8	Front Door Toughened glass 4 mm thick with easy detachable hinges and lock – should be easily removable type.	
9	Two fan directly mounted on the roof top as an exhaust from the cabinet. Fan should be of AC 230V with flow volume of at least 90CFM	
10	Metal Cable Manager - 01U - Plastic Cable Loop's Mountable - Black Fine Tex – 1 Nos.	
11	Mounting Hardware Packet {Contains 1 Nos Each Of 3 } - 20 Set - 1 Pkt.	
12	Power Distribution Unit - 06 Amp Universal - 06 Socket - 16 Amp Switch with Indicator - 06 Amp Fuse - 06 Amp 3 Pin Plug with Power Cable 0.75 sq.mm 1.5-meter Length – 1 No.	
13	Minimum 5 years onsite warranty	

26. 6U Pole Mount Network Rack			
Sl. No.		Description	Compliance (Yes/No)
1	Basic Structure	i. Pole Mount Enclosure should be made of GI 1.6mm thick - 6U 550W X 400D. ii. The Junction Box should be dust proof and waterproof. Should be suitable for outdoor application. iii. Junction Box should have Steel Door of 1.5mm thick with Hood and SK Filter iv. Sides Panels should be welded and should have provision to Mount Fan and Fan Filter on one Side and Louvers on the other side. v. Junction Box Should have Rear internal boltable type with Sealant. vi. Colour: RAL 7035 PP Tex Powder coated: IP55 Protection. vii. 19" Rail for mounting rack mount equipment viii. Rack should have a secondary Rain Canopy ix. Rack should have a 3point locking system with unique lock	
2	Heat Management	Junction Box should have fan unit of 230V.AC,90 cfm with Filter mat Fully Single Wired with 1Mtr long cable with 6A Plug Junction Box should have a Spl Single Hood 1.0mm for filter unit	
3	Hardware	Captive hardware (pack of 20).	
4	Power Management	19" Mounted with 5A, 4 Sockets with power chord with plug.	
5	Grounding	Junction Box should have an earth bar 200X15X3 with M6 tapped holes with insulator and screws assembled	

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27. 20KVA (N+1) Modular Online UPS with Batteries & 30 Min Backup				
Sl.No.	Parameter		Specification	Compliance (Yes/No)
1	System parameter	Rating	20KVA/20kw (3in-1out)/3In- 3out	
		Technology	IGBT based Double conversion PWM based online UPS	
		Parallel mode	4 (N+1)	
2	Input	Rated voltage	400VAC 3-phase, 4-wire	
		Voltage Range	176VAC -287VAC at full load, 100VAC to 287VAC at half load	
		Frequency Range	40Hz ~ 70Hz	
		Power factor	0.95 for Three Phase	
3	OUTPUT	Rated power	20KVA/20kw	
		Voltage	Single/Three phase, 230/400VAC	
		Rated Power Factor	Unity	
		Crest Factor	3:1	
		Voltage harmonic distortion	< 2% (linear load)	
		Dynamic response recovery time	60ms	
		Inverter Overload Capability on utility mode	At 25°C: 105% ~ 125%- 5min; 125% ~ 150% 1min; 150%- more than 200ms	
		Inverter Overload Capability on battery mode	At 25°C : 105% ~125%-60~ 30 s; >125%- more than 200ms	
4	Bypass	Separate bypass	Yes	
		Static bypass	Inbuilt	
5	Efficiency	ECO Mode	96%	
		Online mode (AC-AC)	> 96%	
		Inverter Efficiency (DC-AC)	>92%	
6	BATTERY	Type	Sealed, lead-acid, Tubular, LI- ION	
		Battery number	As per backup times i.e. to give 30 mins backup time on full load	
7	Transfer Time	Mains - Battery	0ms Synchronous transfer: ≤0ms	
		Inverter-Bypass	Asynchronous transfer (default): ≤20ms	
8	Noise		<65db	
9	Panel display mode	Display type	Graphical LCD display	
		Operating temperature	0°C ~ 50°C	

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10	Environmental parameter	Storage temperature	-10°C ~ +70°C (battery excluded); -25°C ~ +55°C (battery included)	
		Ingress protection level	IP20	
11		SNMP	Inbuilt for web monitoring	
		MODBUS	Inbuilt for BMS connectivity	
		Optional SNMP	Power management from SNMP manager and web browser	
		Management software	Site monitor	
		Modbus	Inbuilt via multifunction port	
12	Certifications	Safety (CE)	IEC/EN62040-1-1	
		Electromagnetic Compatibility (EMC)	IEC/EN62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008	
		Surge Protection	IEC/EN62040-2, meeting IEC/EN61000-4-5	
		Energy star	As per UL approved	
		ROHS	Yes	
		Top 5 company in terms of revenue	Yes	
		Quality standard	IS 9001-2015	
		Environment standard	ISO 14001	
		OSHAS	ISO 45001	
		IT security management	ISO 27001	
13	Test report	NABL Approved Government lab test report	Yes	







28. 6KVA UPS with Batteries

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Rating	6KVA/6kw (1in-1out)	
2	System parameter		
(a)	Technology	IGBT based Double conversion PWM based online UPS	
(b)	Parallel mode	4 (N+1)	
3	Input		
(a)	Rated voltage	230 VAC 1-phase, 3-wire	
(b)	Voltage Range	Single Phase 110VAC - 288 VAC	
(c)	Frequency Range	40Hz ~ 70Hz	
(d)	Power factor	≥ 0.99	
4	Output		
(a)	Rated power	6KVA/6kw	
(b)	Voltage	Single Phase 230/220 Vac.	
(c)	Rated Power Factor	Unity	
(d)	Crest Factor	3:1	
(e)	Voltage harmonic distortion	$< 2\%$ (linear load)	
(f)	Voltage Regulation	1%	
(g)	Dynamic response recovery time	60ms	
(h)	Inverter Overload Capability on utility mode	At 25°C: 105% ~ 125%- 10 min; 125% ~ 150%- 1min; 150%- more than 200ms	
(i)	Inverter Overload Capability on battery mode	At 25°C : 105% ~ 125%- 60 ~ 30 s; $> 125\%$ - more than 200ms	
(j)	Isolation transformer	Inbuilt at o/p side	
5	Bypass		
(a)	Maintenance Bypass	Yes	
(b)	Static bypass	Inbuilt	
6	Efficiency		
(a)	ECO Mode	94%	
(b)	Online mode (AC-AC)	$> 89\%$	
(c)	Inverter Efficiency (DC-AC)	$> 88\%$	
7	BATTERY		
(a)	Type	Sealed, Lead-Acid/Tubular/Li-ION	
(b)	Number of batteries	As per OEM for 30 minutes backup time on full load	
8	Transfer Time		
(a)	Mains - Battery	0ms	
(b)	Inverter-Bypass	Synchronous transfer: $\leq 0\text{ms}$	

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(c)		Asynchronous transfer (default): $\leq 20\text{ms}$	
9	Noise	$< 65\text{ dB}$	
10	Panel display mode		
(a)	Display type	Graphical LCD display	
11	Environmental parameter		
(a)	Operating temperature	$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ (2)	
(b)	Storage temperature	$-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$ (battery excluded); $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$ (battery included)	
(c)	Relative humidity	$5\%\text{RH} \sim 95\%\text{RH}$, non-condensing	
(d)	Altitude	$\leq 3000\text{m}$; derating when higher than 3000m	
12	Mechanical parameter		
(a)	Ingress protection level	IP20 or better	
13	Network Management		
(a)	Webpage monitoring	Inbuilt for web monitoring	
(b)	Optional SNMP	Power management from SNMP manager and web browser	
(c)	Dry contacts	Inbuilt	
(d)	Modbus	Inbuilt or Through Integration	
14	Complying standards		
(a)	Safety (CE)	IEC/EN62040-1-1	
(b)	Electromagnetic Compatibility (EMC)	IEC/EN62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008	
(c)	Surge Protection	IEC/EN62040-2, meeting IEC/EN61000-4-5	
(d)	Energy star	As per UL approved	
(e)	ROHS	Yes	
(f)	Frost& Sullivan Report	Yes	
(g)	NABL Approved Government lab test report.	Available	

29. Electrical Cables & Connectors

Sl. No	Specification	Compliance (Yes/No)
1	3 core 2.5 mm Armoured insulated cables suitable for power connection to rack ends from UPS	

30. 63 Amp MCB With Box

Sl. No	Specification	Compliance (Yes/No)
1	63 Amp Miniature Circuit Breaker (MCB) with Socket Box for UPS End	

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31. 16Amp MCB With Box

Sl. No	Specification	Compliance (Yes/No)
1	16 Amp Miniature Circuit Breaker (MCB) with Socket Box for UPS End	

32. MS Conduit

Sl. No	Specification	Compliance (Yes/No)
1	MS (Mild Steel) conduit for use as Optical Fibre Cable ducts.	
2	Inner diameter: 24 mm +/- .4 mm	
3	ISI Marked	

33. 6 Mtr. GI Pole

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Length of the pole	20 Ft, 4 Inch Dia, 4mm thickness	
2	Material	GI	
3	Standard	ISI	
4	Mounting	To be grounded in concrete structure	

34. Lightening Arrestor

Sl. No.	Parameter	Specification	Compliance (Yes/No)
1	Lightening Arrestor for Outdoor Cameras & other items		









Break -up Cost as per Annexure IX: BoQ / Financial Bid
(To be quoted as percentage of total cost quoted) - In PERCENTAGE ONLY

Sl. No.	Name of Accessories	Quantity	Unit	Basic Cost (in %)	GST/Other Taxes (in %)	DDP Price as percentage (in %)
1	SITC of 4 Megapixel or higher Infrared Network Outdoor Pan, Tilt, Zoom Camera - As per Technical Specification	6	Nos	%	%	%
2	SITC of 2 Megapixel or higher Infrared Network Outdoor Varifocal Bullet Camera - As per Technical Specification	90	Nos	%	%	%
3	SITC of 2 Megapixel or higher Infrared Network Indoor Varifocal Dome Camera - As per Technical Specification	261	Nos	%	%	%
4	SITC of Hardware Server for Video Management Software (3 nos. in Active-Active & 1 no. in Passive (Failover)) - As per Technical Specification	4	Nos	%	%	%
5	SITC of Video Management Software, VMS License & Failover VMS License For 435 Cameras - As per Technical Specification	1	Nos.	%	%	%
6	SITC of Hardware Storage for 60 days Recording - As per Technical Specification	1	Nos.	%	%	%
7	SITC of Client Workstation for Control & Live View at Control Room & Remote Site - As per Technical Specification	5	Nos	%	%	%
8	SITC of IP Based 8 Port KVM Switch with LCD Console - As per Technical Specification	1	Nos	%	%	%
9	SITC of 55" Display Unit for Client Workstation - As per Technical Specification	3	Nos	%	%	%
10	SITC of 3x2 49" Thin Bezel Video Wall with All Required Accessories - As per Technical Specification	1	Nos	%	%	%
11	SITC of Layer2 24 Port Gigabit PoE+ with 2x1/10G SFP+ Switch - As per Technical Specification	9	Nos	%	%	%
12	SITC of Layer2 24 Port Gigabit PoE+ with 4x1/10G SFP+ Switch - As per Technical Specification	4	Nos	%	%	%
13	SITC of Layer2 8 Port Gigabit PoE+ with 2x1G SFP Switch - As per Technical Specification	60	Nos	%	%	%
14	SITC of 4 Port Gigabit PoE with 2x1G SFP Industrial Grade Switch - As per Technical Specification	17	Nos	%	%	%
15	SITC of 6 Core Single Mode Armoured Optical Fiber Cable - As per Technical Specification	109200	Mtr	%	%	%
16	SITC of 24 Port Fiber Patch Panel (LIU) - As per Technical Specification	6	Nos	%	%	%
17	SITC of 12 Port Fiber Patch Panel (LIU) - As per Technical Specification	78	Nos	%	%	%
18	SITC of Optical Fiber Patch Cord - As per Technical Specification	180	Nos	%	%	%
19	SITC of Cat6 4 Pair Unshielded Twisted Pair Cable - LSZH (Indoor Purpose) - As per Technical Specification	46	Box	%	%	%
20	SITC of Cat6 4 Pair Shielded Twisted Pair Cable - LSZH (Outdoor Purpose) - As per Technical Specification	8	Box	%	%	%

Corrigendum – Compliance to Indian Certifications

Reference: Bid No. GEM/2025/B/6683138

Subject: Clarification/Response to Representation regarding Foreign Certifications Requirement

With reference to the representations received from bidders regarding the requirement of mandatory foreign certifications such as FIPS 140-2/3, ISO 27701, CMMI, etc., for CCTV Cameras and Video Management System (VMS) under the referred GeM Bid, the following clarification is hereby issued:

“All products and services offered shall comply with specified certifications and equivalent Indian statutory certification requirements including BIS / ISI, ISO-based Indian standards, STQC / CERT-In security validations, and MTCTE (for telecom/networking equipment). Certifications originating from Chinese or any border-sharing countries with India shall not be accepted.”

This corrigendum shall form an integral part of the bid document. All other terms and conditions remain unchanged.

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
1.	Query based on 48-50 switches specs GEM/2025/B/6683138	Assumptions 1. Any listed networked device (cameras, servers, storage, client workstations, KVM, switches, video-wall controller) is counted as 1 MAC unless stated otherwise. 2. Items like patch panels, racks, cables, conduits, poles, and lightning arrestors do not count as network endpoints. 3. VMS license and boxes without explicit NICs are not counted as endpoints. 4. If APs or other multi-client devices are later added, recalculation is required. Digit-by-digit counts Total networked devices (sum of items counted as networked): 459 MACs. Recommended engineering headroom (30%): 30% → Total with headroom: 597 MACs. Per-switch & PoE ports summary Total PoE-capable ports from BOM (calculated from all PoE switch items): 2692 ports. Total PoE switches (sum of PoE switch quantities): 167 units. Average networked devices per switch (approx): 2.75 devices/switch		Reply given below.
2.	Conclusions & Recommendation	1. The BOM results in a total of 459 MAC addresses; including 30% headroom, design for 597 MAC entries. 2. Edge/industrial switches (with 16K MAC capacity) are MORE THAN ADEQUATE for this BOM: per-switch and per-port device counts are orders of magnitude below the 16K table limit. 3. The tender requirement for 32K MAC per switch appears over-specified for this BOM. If the purchaser insists on 32K at every access switch, provide architecture justification showing edge devices on industrial switches and core/aggregation on high-capacity switches. 4. If wireless APs or other multi-client devices will be added, re-run the calculation; update the headcount and recalculate MAC totals. Tender Justification Text Deviation & Technical Justification — MAC Capacity The proposed BOM yields a total of 459 network endpoints (MAC addresses). With a 30% engineering headroom, the network should be designed for 597 MAC entries.		Bid requirement is 16K MAC for 24-Port switches and 8K MAC for 8-Port Switches and 4-Port Industrial switches. This specification is very basic because the required MAC capacities are standard and common among all enterprise-grade Original Equipment Manufacturers (OEMs) for these type of switches. Having this capacity is important to ensure future scalability and flexibility to be reused for other purposes.
3.	Access Control Entries (ACE)	— Technical Clarification & Justification Purpose Explain why the tender's requirement of minimum 2,000 Access Control Entries (ACEs) per switch is over-provisioned for the provided BOM, provide		In the specification 2000 Access Control Entries (ACEs) is mentioned.

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
		digit-by-digit ACE estimates under different scenarios, and present a practical recommendation and justification text for tender submission.		
4.	Digit-by-digit ACE calculations (three scenarios)	Scenario A — Conservative / Per-device ACLs (worst-case): • Assumption: Each endpoint gets 2 ACEs (1 allow, 1 deny/log) → 2 ACEs/device. • Calculation: 459 devices × 2 ACEs = 918 ACEs. • With 30% headroom: $918 \times 1.3 = 1,192.8$ → round to 1,193 ACEs. • Conclusion: Entire system worst-case ACEs $\approx 1.2K$ (global), still less than 2K per switch. Scenario B — Realistic architecture (recommended): • Assumption: Use VLANs, port-based security, aggregate ACLs at aggregation/core and reuse ACL objects. • Typical edge ACL usage: 10 ACEs per access switch (allow camera VLAN → NVR, block management, IGMP, QoS policers etc.). • With 90 PoE switches (BOM), total ACEs $\approx 90 \times 10 = 900$ ACEs (but many are references to the same ACL objects). • Conclusion: Realistic ACEs globally are on the order of hundreds (≈ 500 –1,000), not 2,000 per edge switch. Scenario C — Minimal / Coarse rules (best practice):		Justification does not withstand as nowhere in the specification 2000 Access Control Entries (ACEs) is mentioned.
5.		Scenario C — Minimal / Coarse rules (best practice): • Assumption: Edge ACLs are minimal (VLAN permit rules + default deny). Estimate 5 ACEs per edge switch. • 90 edge switches × 5 = 450 ACEs total. • Core/aggregation may have 50–200 additional ACEs for cross-site policy. • Conclusion: Total ACEs ≈ 500 –800 in a conservative production design.		Justification does not withstand as nowhere in the specification 2000 Access Control Entries (ACEs) is mentioned.
6.	Numeric Recommendation	For the given BOM (459 endpoints, ~90 edge PoE switches): • Edge/Industrial access switches: Recommend 64–128 ACEs per switch (typical actual need: 10–50 ACEs). 128 ACEs is a conservative upper bound. • Aggregation/Core: Provision 1,000–2,000 ACEs where full policy enforcement is centralized. • Tender rewrite suggestion: Instead of '2,000 ACEs per switch', specify ACE counts by role: Edge ≥ 64 (or 128); Aggregation/Core $\geq 2,000$		Specification is as per the requirement of the organization to setup the infrastructure.
7.				
	Ethernet Ring Protection Switching (ERPS) (ITU-T	We have spanning tree which is enough to handel loop for network	Kindly remove Ethernet Ring	ERPS provides protection for Ethernet traffic in a ring topology, while

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
	G.8032)		Protection Switching (ERPS) (ITU-T G.8032)	ensuring that no loops are within the ring at the Ethernet layer. ERPS handles loops through pre-configured protection switching (much faster and recovery time < 50 ms). And also Scalable multiple rings can be interconnected. It is a standard protocol available across all OEM's.
	Dying Gasp	Is there are any actual usage of this option in your network?	If not Kindly remove this point	Dying Gasp is a feature in networking devices that sends an alert to a network management system when the device is about to shut down due to a power failure. It is actively used and valuable in carrier-grade, industrial, and remote site networks, when remote monitoring or uptime visibility is critical. It is a standard protocol available across all OEMs.
	6KV surge protection	Any switch has an inbuilt surge protection, also we have an lifetime hardware replacement warranty for our switches	Kindly accept this point as "Should have an inbuilt surge protection"	6 kV surge protection is typically applicable for outdoor or field-mounted network equipment exposed to direct lightning or high-energy transient conditions (such as pole-mounted cameras, roadside units). It is mandatory requirement for outdoor equipment.
	Industrial PoE Switch	There are no actual usage of Industrial PoE Switch in your non-industrial region where temperature can go to a maximum of 35 degree Celsius. Moreover whenever you are planning to install any switch (Industrial or Non industrial) in outdoor location, you need an outdoor IP67 rated enclosure for that.	Kindly remove this point and consider the same 8 port PoE switch in place of	NEIGRIHMS is planning to install Cameras at different outdoor locations which will be connected via these PoE switches, hence it is important to have industrial grade

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
		Hence there is no actual usage of Industrial switch in your location.	Industrial switch. It will save a visible hard earned Govt. money.	switches so that any type of surge is not passed on to the camera which may damage it from lightning and thunderstorm. For better longevity it is important to have industrial grade product which will save our recurring repair expenditure. It is recommended as per our technical consultant for outdoor areas.
		Please include	Please include some hardware details along with some more layer 3 features to increase the ruggedness of the switch for both types of 24 port switches :- 16MB packet buffer 2Gb RAM, Quad-Core Cortex-A57 ARMv8 1.8Ghz 64-bit CPU, PIM-SM, DM and SSM multicast routing, DHCP Server	This is an OEM Specific point. Cannot be incorporated.
		Please include	Please include some hardware details for both types of 8 port switches (Industrial and Non-Industrial):- ARM A9	This is an OEM Specific point. Cannot be incorporated.

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
			1.25Ghz 32-Bit Processor, 2GB RAM, Flash: 256 MB, Packet buffer memory: 16 MB or better.	
		Please include	Please include MTCTE for TEC certification for all types of switch	All network switches proposed in the project must comply with the applicable MTCTE certification requirements under TEC, DoT. OEM must submit valid MTCTE Certificate(s) or Test Compliance Acceptance (TCA) for the relevant product category as per the latest TEC Mandate List.
		Please include	Please include a minimum of 700000 Hours of MTBF for each switches. It is the value which any OEM declares to understand their product's strength	Bid requirement is with 3 years warranty and 4 years AMC with proper SLA, hence this is not required.
8.	6.22 (V, VII) – VMS (Video Management Software) v. ISO 27017:2015 – Information Security Control for Cloud Services vii. ISO 27701:2019 – Security Techniques Extension to ISO 27001 for Privacy Information Management Requirement & Guidelines Submit	Request you to please amend the same to allow more participants to participate.	Kindly remove the ISO certifications as they are not related to the solution proposed. the solution is on cloud services architecture.	The ISO 27017:2015 stands deleted.

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
	accredited, in-scope, still-valid ISO 27017 (cloud security) and ISO 27701 (privacy extension to ISO 27001) certificates with scope statement, verification link, and clear role coverage (CSP/MSP; PII Controller/Processor), and reject “under process” or out-of-scope proofs.			
	6.23 (II) – VMS (Video Management Software) ii. Appraisal Certificate of CMMI V2.0 Level-3 to be submitted as a proof. Please confirm that proof must be a CMMI V2.0 Maturity Level 3 Benchmark Appraisal. Some organisations have CMMI Level 5; request you to kindly add CMMI 5.	Kindly remove	Request to remove the CMMI as these are foreign certificate and accept SQTC certification.	STQC is already mentioned. CMMI & STQC are two different parameters of certificates and major Indian Companies have CMMI Certification.
	6.24 (I, II) – VMS (Video Management Software) i. The VMS Software OEM shall have a direct Registered Office and shall also have a Research & Development Center in India without any Collaboration, Joint Venture, Distributor, Parent Company and should be in operation for the last 10 years as on the last date of bid submission.ii. The VMS OEM should be in the business of Video Management Software for the last 10 years, OEM to	As per MII, some OEMs have started manufacturing and software development. Thus, request you to kindly amend the clause to 3 years for more OEM participation.	The GeM Office Memorandum (dated 22nd Sept 2025) advises that eligibility conditions like 5/10/15 years of experience are restrictive and discourage new Indian manufacturers under the Make in India framework. Reducing the experience requirement	Revised Eligibility Requirement: “The VMS OEM must have been in the business of Video Management Software for a minimum of 4 (Four) years as on the date of bid submission, with valid documentary proof of successful deployments.”

Sl. No.	Content of Bid Requiring Clarification	Points of Clarification Required	Suggestion if any	Reply
	submit purchase order copies to substantiate the proof.		to 3 years will ensure broader participation while maintaining quality and compliance.	
	6.28 (I, II) – VMS (Video Management Software) i. The offered VMS must be cybersecurity certified with FIPS-140-2 & FIPS-140-3 encryption from Indian body for mitigating cybersecurity risk.ii. The FIPS 140-2 & FIPS 140-3 Certification should be done on or before the Bid Publishing Date. A valid certificate for FIPS 140-2 & FIPS 140-3 for the VMS Application to be submitted as a proof.	Remove these foreign certification : FIPS-140-2 & FIPS-140-3. Please ask for VMS to be STQC compliant as it ensures cybersecurity is matched.	VMS should be STQC certified.	STQC is already mentioned. FIPS-140-2 & FIPS 140-3 is an additional layer of security stands for the following: <ul style="list-style-type: none"> a. Video data is encrypted at rest (storage) & in transit (network) b. Cryptographic algorithms are validated & temper resistant. c. Reduces risk of interception, tampering, or unauthorized decryption. d. FIPS compliance ensures all these modules exchange encrypted data using standardized and validated methods, preventing vulnerabilities at integration point. Thus, beyond STQC, FIPS is required. The same is also available across all major OEM.
	Certification: The cameras shall be manufactured by a firm/OEM whose quality system is in compliance with ISO	Please remove ISO 5000, ISO 45001, ISO 20001, ZED Gold, and CMMI Level 5 certifications, as they are not directly applicable to CCTV systems.	Kindly remove for wider OEM participation.	All these certificates are standard and acquired by all major OEM's. ZED Gold is highest standard & for Indian MSME's.

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	9001:2015, ISO 14001:2015, ISO 27001:2013, ISO 45001:2018, ISO 20000, ISO 50001, ZED Gold, GDPR, and CMMI Level 5.			
9.				
	8. KVM Switch with LCD Console 17. LCD console tray should be global certified by most of the agencies like UL, CE, CCC, BSMI, EAC, VCCI, KCC, FCC Class A	UL, CE, CCC, BSMI, EAC, VCCI, KCC, FCC Class A, these are foreign certificates P-45014/33/2021-BE-II (E-64737) Dated : 20-12-2022, and as per the Indian Government Guidelines these foreign certifications can't be asked in tender. So, we are requesting to you, Kindly remove these certificates	Kindly remove these certificates	All these certificates are available with all major OEM's and required as per the parameters mentioned. You may also provide equivalent.
	9. 55" Display for Live View of Cameras 14. Input : Minimum 3 x HDMI, DP, DVI-D , Audio and 2 x USB 15. Output : HDMI/DP , Audio 16. External Control : RS232C In/out , RJ45 (LAN) In, IR In	14. HDMI and DP both are equivalent port and HDMI already asked in the specifications. So, there is no requirement of DP Port. Hence, we request please remove this DP port. Please remove DVI-D port as DVI-D port is Analog (Analog which carry only video signals) & outdated port, which is not much used with latest technology in market. All reputed OEM upgrade our product as per latest technology & market reasearch and carry all Digital ports like HDMI which carry both Video & Audio signals and already asked in the specifications. 15. As per the solutions requirement, there is no requirment of HDMI/DP Output port. Hence, we request you to please remove this port. 16. There is no requirement of RS232C and IR In port because there is no devices controller using in the solution and this port is used for the controlling purpose. So, we request kindly remove RS232C In/Out and IR In ports.	Kindly remove DP Port, DVI-D Port, HDMI/Dp out Port, RS232C IN/OUT, IR INPORT	All ports are mandatory as this helps to control and monitor. Also helpful for future integration.
	9. 55" Display for Live View of Cameras 24. Content Management Software Required 25. Control and Monitoring Software :	24 & 25. Content Management Software and Control and Monitoring Software are available with specific OEM and restrict all other reputed OEM participation. So, we request please remove these softwares for wider participations. 26. CB is the foreign certificates. As per Indian Government Guidelines only BIS is applicable. So, we are requesting to you,	Kindly remove these : 24. Content Management Software Required 25. Control and	CMS is our functional requirement. Certifications mentioned are available with major OEM's.

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	Required 26. Certification :Safety :CB 28. ErP / Energy Star : Yes / Yes	kindly remove these foreign certificate and consider BIS Certificate only. 28. Energy Star certificates is applicable for the domestic products only. So, we requested to you, kindly remove this certificate.	Monitoring Software : Required 26. Certification :Safety : CB 28. ErP / Energy Star : Yes / Yes	
	9. 55" Display for Live View of Cameras	Additional Clause: As considering the requirement of Surveillance solution, department should consider a professional display with at least 4mm inbuilt toughen glass for display protection.	Request to add minimum 4MM toughened Glass for the display.	Generally 4MM toughened glass needed for touch screen monitor i.e. Interactive Digital Board. As we use this display as for viewing purpose only toughened glass not required.
	9. 55" Display for Live View of Cameras	Additional Clause: OEM of Display should have a valid BIS license for Display for the last 5 years and as per BIS, manufacturing facility should be in India. Quoted model should be included in the same BIS before the publishing of this bid and should be verifiable online from BIS website. The manufacturing facility may be subjected to physical inspection by the representatives of the buyer on demand. All necessary documents to be submitted.	BIS License for last 5 years should be asked.	Only product BIS certificate is mandatory. As mentioning 5 years will make it specific to a particular OEM.
	10. Video Wall with Accessories	Technical Specifications Please consider Active LED Video Wall over LCD based Video Wall because Active LED Video wall is the latest technology and LCD based Video Wall is the outdated technology and obsolete from the market. There are several merits of Active LED Video Wall over LCD based Video Wall are mentioned below : 1. Seamless Viewing Experience (No Bezels). 2. Superior Brightness and Contrast. 3. Better Color Accuracy and Uniformity. 4. Scalability and Flexibility in Size. 5. Longer Lifespan and Durability. 6. Easier Maintenance and Front Access. Kindly generalize the specifications as better option.	Request to consider Active LED technology.	The information regarding LCD based video wall is not true, it is not obsolete from the market. We will use this display for CCTV monitoring and resolution is very less in Active LED compared to LED video wall.
	10. Video Wall with Accessories	Additional Clause OEM of Display should have a valid BIS license for Display for the last 5 years and as	BIS License for last 5 years should	Only product BIS certificate is mandatory. As mentioning 5 years

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		per BIS, manufacturing facility should be in India. Quoted model should be included in the same BIS before the publishing of this bid and should be verifiable online from BIS website. The manufacturing facility may be subjected to physical inspection by the representatives of the buyer on demand. All necessary documents to be submitted.	be asked.	will make it specific to a particular OEM.
	10. Video Wall with Accessories	UHD+ 8x8 HDMI Matrix Switcher As per the CCTV Monitoring application in Control room with different VMS Server and existing devices at same time we recomand to ask for 8 x 8 HDMI Video wall controller with custome based multi layout functionality, which will be healpful to see all the devices at same time or as per viewing requirtment on Video wall display.	Display controller shall be added in place of matrix switcher considering the use case.	Bid requirement is 8x8 HDMI Matrix Switcher& it was finalized by technical committee members according to requirement.
	10. Video Wall with Accessories	Additional Clause LED Display Controller - OEM of Led Display Controller should have a valid and separate BIS license for Led Display Controller and as per BIS OEM of Led Display and Led Display Controller should be same OEM. And as per BIS, manufacturing facility should be in India. Quoted model should be included in the same BIS before the publishing of this bid and should be verifiable online from BIS website. The manufacturing facility may be subjected to physical inspection by the representatives of the buyer on demand. All necessary documents to be submitted. As BIS is essentail for the conrtroller as Video wall controllerer is a critical component of survillance project.	BIS license for the LED controller should avaiable and should be woth the same OEM of the Display.	LED Display Controller from any BIS/ISO or equivalent certified OEM shall be accepted, provided the quoted model holds a valid license and is verifiable online.
	11. 24 Port PoE Switch with 2 x 10G SFP+ Port	1. Dual AC/DC Power Supply from day one A single power supply simplifies circuit design and reduces the number of components needed. It is more cost-effective and occupies less board space. Additionally, it minimizes potential grounding and noise issues common in dual supply systems. So, we requesting you, please consider Single AC/DC Power Supply or better from day one	Single AC/DC Power Supply or better.	Dual AC/DC Power Supply is required as CCTV Surveillance is very critical & there should not be any disruption due to power supply failure. Also Dual Power supply provides increased capacity (to provide more total power, like for high-power Power over Ethernet, or PoE).
	11. 24 Port PoE Switch with 2 x 10G	2. General Specification:	Remove HA feature.	HA is a basic feature in all enterprise grade switches.

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	SFP+ Port	<p>iii. Switch should support High Availability (HA) features like Stacking/VCS/VSS/virtual chassis technology or equivalent technology with minimum throughput of 80 Gbps. The HA feature should include up to 4 switches in a single logical unit. For Virtual Chassis/ Stacking of the switches, Dedicated Ports or additional 2 no's 10G SFP+ slots should be available from Day-1 to be utilized.</p> <p>Please remove this HA feature because this requirement is overly complex and costly for a 24-port PoE switch, which typically serves as an access-layer device where such high-throughput HA features and stacking capabilities are unnecessary. Removing it allows for more suitable, cost-effective switch options without compromising functionality.</p>		Multiple options mentioned for wide participation amongst OEMs.
	12. 24 Port PoE Switch with 4 x 10G SFP+ Port	<p>1. Dual AC/DC Power Supply from day one A single power supply simplifies circuit design and reduces the number of components needed. It is more cost-effective and occupies less board space. Additionally, it minimizes potential grounding and noise issues common in dual supply systems. So, we request you, please consider Single AC/DC Power Supply or better from day one</p>	Single AC/DC Power Supply or better.	Dual AC/DC Power Supply is required as CCTV Surveillance is very critical & there should not be any disruption due to power supply failure. Also Dual Power supply provides increased capacity (to provide more total power, like for high-power Power over Ethernet, or PoE).
	12. 24 Port PoE Switch with 4 x 10G SFP+ Port	<p>2. General Specification: iii. Switch should support High Availability (HA) features like Stacking/VCS/VSS/virtual chassis technology or equivalent technology with minimum throughput of 80 Gbps. The HA feature should include up to 4 switches in a single logical unit. For Virtual Chassis/ Stacking of the switches, Dedicated Ports or additional 2 no's 10G SFP+ slots should be available from Day-1 to be utilized.</p> <p>Please remove this HA feature because this requirement is overly complex and costly for a 24-port PoE switch, which typically serves as an access-layer device where such high-throughput HA features and stacking capabilities are unnecessary. Removing it allows for more suitable, cost-effective switch options without compromising</p>	Remove HA feature.	HA is a basic feature in all enterprise grade switches. Multiple options mentioned for wide participation amongst OEMs.

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		functionality.		
	19. Cat 6 UTP Cable	5 : ETL Certificate @700 MHz Cat6 Cable should have test by ETL @700 MHz, TEST report should be submitted along with bid. ETL (originally from Electrical Testing Laboratories) is a certification mark issued by Intertek, a US-based testing laboratory. It indicates that a product has been tested and meets North American safety standards (like UL or CSA). So, it's a recognized safety certification primarily used in the United States and Canada and as per the Indian Government Guidelines P-45014/33/2021-BE-II (E-64737) Dated : 20-12-2022, foreign certifications can't be asked in tender. So, we are requesting to you, Kindly remove these certificates So, we are requesting to you. Kindly remove this certificate	Remove Foreign certificates.	Test report to be submitted for ETL/Intertek certificate @700 MHz. Certificates mentioned are nonproprietary hence no change.
	20. Cat6 STP Cable	5. Standard : UL 1581 VW1, EN0256-2-1 UL 1581 VW1, EN0256-2-1 standard, these are foreign standards and available with very less OEM. For maximum participation, Kindly remove this point.	Remove Foreign certificates.	Test report to be submitted for ETL/Intertek certificate @700 MHz. Certificates mentioned are non proprietary hence no change.
	21. Cat 6 UTP Patch Panel	3 : Plastic Housing Jack Connector : Polycarbonate, UL94V-0 rated or equivalent UL94V-0 rated these are foreign rated standards and available with very less OEM. For maximum participation, Kindly remove this point.	Remove Foreign certificates.	Test report to be submitted for ETL/Intertek certificate @700 MHz. Certificates mentioned are non proprietary hence no change.
	23. 42U Floor Mount Rack	16. ISO Certifications : OEM should have 9001:2008, ISO Certifications. OEM should have IATF or equivalent Certifications Kindly remove IATF certificate because The IATF 16949 certification is a global quality management standard specifically for the automotive industry. It defines the requirements for a Quality Management System (QMS) to ensure consistent quality in the design, development, production, and installation of automotive-related products.	Remove Foreign certificates.	Certificates mentioned are standard and non proprietary.
	25. 6U Wall Mount Network Rack	6 : UL approved product as per UL 2416., ISO 9001:2015 & ISO 14001:2015	Remove UL certificate.	Certificates mentioned are standard and non

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		UL is an foreign certificate and as per the Indian Government Guidelines P-45014/33/2021-BE-II (E-64737) Dated : 20-12-2022, foreign certifications can't be asked in tender. So, we are requesting to you. Kindly remove this point.		proprietary.
	27. 20KVA (N+1) Modular Online UPS with Batteries & 30 Min Backup	12. Certifications : *Energy star As per UL approved **Top 5 company in terms of revenue : Yes ***IEC/EN62040-1-1 ***IEC/EN62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008 ****IEC/EN62040-2, meeting IEC/EN61000-4-5 *Energy star As per UL approved, this is an foreign certificate and as per the Indian Government Guidelines P-45014/33/2021-BE-II (E-64737) Dated : 20-12-2022, foreign certifications can't be asked. So, we are requesting to you, Kindly remove this certificate. **Please remove this certificate, there are very less OEM are top 5 revenue company certification YD/T1095-2008 is chineses standard, IEC/EN61000-3-11, IEC/EN61000-3-12 - OEM specific. Kindly remove this certificate as it chinese standard & no relavce with the UPS product.	Remove Foreign certificates.	YD/T1095-2008 removed.
	28. 6KVA UPS with Batteries	14. Complying standards : (d) Energy star As per UL approved **Top 5 company in terms of revenue : Yes ***IEC/EN62040-1-1 ***IEC/EN62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008 ****IEC/EN62040-2, meeting IEC/EN61000-4-5 **Frost& Sullivan Report Energy star As per UL approved, this is an foreign certificate and as per the Indian Government Guidelines P-45014/33/2021-BE-II (E-64737) Dated : 20-12-2022, foreign certifications can't be asked. So, we are requesting to you, Kindly remove this certificate. **Please remove this certificate, there are very less OEM are top 5 revenue company certification YD/T1095-2008 is chineses standard, IEC/EN61000-3-11, IEC/EN61000-3-12 - OEM specific. Kindly remove this certificate	Remove Foreign certificates.	YD/T1095-2008 removed.

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		as it chinese standard & no relavce with the UPS product.		
	Eligibility Criteria	Additional Clause-OEM Turnover Please consider OEM of CCTV Cameras, VMS Server, KVM Switch, POE Switches, Displays, Video Walls should have an average annual turnover of Rupees 25 Crores for the last three financial years to get the established OEMs participations.	OEM Turnover should minimum 25Cr.	The tender will be quoted by vendors hence the required turnover as per GFR guidelines is already mentioned.
	Eligibility Criteria	Additional Clause-Product catalogue Technical Catalogue of quoted product to be attached with the technical bid and same should be available on OEM website. Non-compliance shall result in rejection of tender.	All Quoted product should be available on OEM website, publicly.	Already mentioned in ATC point no: E & F for product authentication.