

File No.SVPNPA-COMP0PROC(C117)/33/2021-O/o AD(IT)

SARDAR VALLABHBHAI PATEL NATIONAL POLICE ACADEMY
(Government of India : Ministry of Home Affairs) Hyderabad
– 500 052

OPEN TENDER NO : 16330/HK-3/2021

**TENDER FOR UPGRADATION OF NVR & DISPLAYS IN CCTV
CONTROL ROOM FOR SARDAR VALLABHBHAI PATEL,
NATIONAL POLICE ACADEMY, HYDERABAD**

Date of Tender Enquiry :15/11/2021

Closing date & time of submitting bids : 06/12/2021 at 1000 Hrs.



Website: <http://www.eprocure.gov.in>

**SARDAR VALLABHBHAI PATEL NATIONAL POLICE
ACADEMY
(Government of India : Ministry of Home
Affairs) Hyderabad – 500 052**

OPEN TENDER
(e-Tender)

1. SVP National Police Academy, Shivrampally, Hyderabad, invites **e-bids** under two-bid system from reputed firms for **upgradation of NVR & Displays in CCTV Control Room** for the Academy.

2. Salient features of the tender enquiry are as follows:-

a)	Tender No.	16330/HK-3/2021
b)	Description of stores	Upgradation of NVR & Displays in CCTV Control Room (As per technical specification attached as Appendix) for the Academy
c)	Type of Tender	Open Tender
d)	Bid System	Two Bid System (Two cover Technical Bid & Financial Bid)
e)	Earnest Money Deposit	Bid Security Declaration should be uploaded as per the form attached to the NIT
f)	Delivery schedule / completion period	Upgradation should be completed within 90 days from the date of issue of upgradation order by the Academy.
g)	Bid validity	Bid should be valid for 180 days from the date of opening of bid.
h)	Address of correspondence	The Administrative Officer (Admn) SVP National Police Academy, Shivrampally, Hyderabad, Telangana – 500052

3. Interested manufacturers/ authorised dealers/ stockists/ suppliers dealing with above items can download the tender document from CPP Portal (www.eprocure.gov.in) and bid can only be submitted through the same website. Bid submitted other than CPP Portal will not be accepted. Important dates related to this tender are furnished below for information.

S.No.	Particulars	Date	Time
1.	Date of online publication of tender	15-11-21	1800h
2.	Starting date for downloading Tender document	15-11-21	1805h
3.	Bid submission starting date	15-11-21	1810h
4.	Bid submission closing date	06-12-21	1000h
5.	Opening of technical bids	07-12-21	1000h

4. The Eligible bidders should have the valid digital signature certificate (DSC) issued from any agency authorised by Controller of Certifying Authority (CCA), Govt. of India.

5. **Terms and Conditions.** In this NIT, Contract Operating Officer means The Director, Sardar Vallabhbhai Patel National Police Academy or any other officer authorised on his/her behalf :-

(a) The bids are invited online under two cover system (Technical bid – Cover-1) and price bid/bid of quantity (BOQ) (Cover-2) from eligible bidders.

(b) Tender shall be submitted online only at CPPP website. Bidders are advised to refer the Bidders manual kit for e-submission of the bids online through the Central Public procurement portal available at the website: <http://www.eprocure.gov.in>. Aspiring Bidders/ Suppliers who have not enrolled/ registered in e-procurement should enroll/register before participating through the website <http://www.eprocure.gov.in>. The portal enrolment is free of cost.

(c) Tax imposed by State Government from time to time on contracted item/software/services, if any will be deducted from the contractor's bill and deposited to State Government under appropriate budget head/revenue head.

(e) Total amount quoted by bidder for the upgradation of NVR & Displays in CCTV Control Room will be considered for deducing the L1 tender.

(f) Conditional tenders/bid will not be accepted. Bidder should clearly indicate additional charges involved in operation of contract, if any. Offers with stipulation like "if applicable" will be treated as vague and shall be ignored.

(g) The department may ask for production of original document submitted by the bidder for verification to confirm the correctness. If any document submitted by firm/bidder is found to be fake/not legitimate at any stage of tender, the penal action as per provision of contract will be initiated.

6. Bidders can access and download the tender documents from CPP Portal and can fill them with all relevant information and submit the completed tender documents online on the website: <https://www.eprocure.gov.in/eprocure/app>. The downloading of tender documents shall be carried out strictly as provided on the website. No editing, addition, deletion of matter shall be permitted. If such action is observed at any stage, such tenders are liable for outright rejection.

7. All the documents as per tender requirement should be uploaded online and further, no documents will be accepted offline. Bidders not submitting any of the required documents online will summarily be rejected.

8. The details of the Tender documents and Bid Security Declaration should be filled and uploaded online.

9. The TIA (Tender inviting authority) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour. For any queries regarding e-tendering process, the bidders are requested to contact over phone : 040-4200462, 08826246593, 040-24234488 or send a mail over to cppp-nic@nic.in.

10. Following scanned documents in PDF/Excel file format must be uploaded in respective covers duly signed and stamped.

Documents to Accompany First Cover (In PDF)

(a) No bid will be considered unless and until all the pages / documents comprising the bid are properly numbered, signed and stamped by the person/s authorized to do so.

(b) The firm must upload scanned and attested copy of following documents:-

(i) NIT Documents duly signed and stamped.

(ii) Firm Registration Certificate.

(iii) GST Registration.

(iv) PAN Card of the firm.

(v) All documents as per Annexure 1 & 2.

(vi) **Previous year IT Return (Financial Year 2019-20) and Annual Report of last three years (2018-19, 2019-20, 2020-21).** The cumulative financial turnover of the bidding firm during the last three years, ending on 31 March 2021 should be minimum **Rs 1.8 crore** (or equivalent in foreign currency at exchange rate prevalent on 31 March 2021) the as per the annual report (audited balance sheet and profit & loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India or equivalent in relevant countries.

Note : Bidding Firm (manufacturer or principal of authorised representative) should not have suffered any financial loss for more than one year during the last three years, ending on 31 March 2021.

(vii) Filled in Commercial Information of firm in .xls format (Available in website along with NIT) to include Banker's and firms details.

(viii) LOB (Letter of bid). Incomplete LOB or without address, email, telephone Nos, etc, the bid is liable to be rejected.

(ix) Undertaking that any Government organization/(s) have not have blacklisted debarred/suspended the bidding firm.

(x) Bid Security Declaration. **Offers received without the prescribed Bid Security Declaration, will be rejected summarily.**

Second Cover :-

(c) **The Financial bid (In excel file like BoQ)** :- The rates i.e, the total cost for **upgradation of NVR & Displays in CCTV Control Room (As per technical specification attached as Appendix) should be inclusive of all taxes, labour charges and installation charges, if any, are to be quoted explicitly both in words and figures.** No excess amount beyond the quoted amount will be considered at any stage of tender.

(d) The price once accepted by the purchaser shall remain fixed for the currency of contract and valid till the successful execution of the complete order to the satisfaction of the purchaser.

(e) The offered amount **shall be inclusive of all the Taxes (including GST), handling, installation charges, etc.**

(f) The price shall be quoted in Indian rupees only.

11. The Bid / Tender submitted shall necessarily remain valid for 180 days after the date of financial bid opening. If any bidder withdraws his tender before the said period, SVP NPA shall-without prejudice to any other right or remedy, be at liberty to suspend the bidder from participating in tender for a specific period decided by the Academy in terms of Bid Security Declaration.

12. Liability of the purchase order getting cancelled, if the quality/progress of the software is found to be not satisfactory or if there is an inordinate delay of more than three weeks of issuing purchase order. The bidder will be accordingly blacklisted by the Academy.

13. The successful tenderer has to enter into an agreement with the Academy for smooth upgradation during the currency of contract.

14. Upgradation is to be completed within **90 days** from the date of order failing which a penalty **of 0.5% per week will be levied** subject to maximum 10% of the contracted value unless extension is obtained in writing from the office on valid ground. Further in case of inordinate delay of three weeks from the date of purchase order, the purchase order stands cancelled and penal action as per provision of contract will be initiated without any further notice.

15. The date of placing the order shall be the date of dispatch of order or the delivery thereof to the tenderer, when such order is being delivered through some other person.

16. If the tenderer fails to upgrade within stipulated period then the purchase order will stand cancelled and the security deposit shall be forfeited. In addition, the tenderer may be blacklisted as per provision of contract.

17. After the expiry of the stipulated delivery period, which includes extension period, if any, no service shall be accepted by SVP NPA. If the tenderer applies for the extension period to carryout service, the extension can be granted on case to case basis.

18. Notwithstanding any of the conditions and clauses indicated in the Tender form, the Director has whole and sole right to accept or reject either the lowest or any other valid bid and or **split up the order** for the upgradation to more than one bidder or to cancel the tender without assigning any reasons thereto.

19. Penal Action for Non-Compliance of Terms and Condition of the Contract.

(a) The tenderer is liable to be suspended from participating in the tender, if he withdraws his bid (any time after deposition of tender or before accepting the contract).

(b) The tenderer may also be suspended if the tenderer derogates any terms/conditions of the tenders, raises conditions with malafide intention to delay/scuttle tender procedure or quotes fictitious/unrealistic rates/costs.

(c) If a tenderer willfully neglects or fails to perform or observe any condition of the contract or attempts to cheat or indulge in fair practices with the motive of making undue gain, the Director may impose a ban on future contracts by the SVP National Police Academy with that contractor.

(d) In case a tenderer fails to comply with the purchase order issued by the Academy or to perform his part of the contract to the entire satisfaction of the Academy or fails to abide by the terms of the contract, the contractor shall be liable to all following actions or any of the following actions, as may be decided by the Director to this Academy :-

- (i) Forfeiture of Performance Security in whole or in part.
- (ii) To make good the loss caused to the Government.
- (iii) Cancellation of the contract without any prior notice to the contractor.
- (iv) Debarment from entering into contract with the Academy for period specified by the competent authority.

(e) In event of contractors performance security deposit being reduced by means of forfeiture, the contractor within 15 days from the date of intimation of the reduction shall restore the performance security to the original value, failing which, the Contract Operating Officer will recover the amount involved from any amount due to the contractor by the government or from any other assets of the contractor held with the Academy.

(f) All losses sustained by the government due to failure, omission or neglect of the contractor may be realised from the performance security or any other amount , which may be due to be paid to contractor from the Academy.

(g) In case of rejection of any services by the Academy or in case of neglect, failure or delay on the part of the contractor to comply with the upgradation order issued by the Academy, the Academy may without prejudice to any other action which the department may take under the terms of the contract, will be at liberty to purchase the service from any other source. Any expenditure incurred in excess of the contracted value shall be borne by the contractor or recovered from his security deposit and/or from any amount which may be due to be paid to the contractor by the Academy.

(h) The bidder will be blacklisted by the Academy in case of breach/non-compliance of terms and condition of contract.

(j) The Director SVP NPA reserves the right to cancel the order without pre notice, forfeit the security deposit or recover any damages for any breach of contract.

20. **Performance Security Clause** :- The successful bidder on receipt of upgradation order should submit a Bank Guarantee (3% of the order value) issued by any Nationalized Bank in favour of the Director, SVP National Police

Academy, Hyderabad payable at SBI Shivrampally, Hyderabad within 14 days of the award of contract for due performance as per the provisions contained in GFR-171. Failure on the part of the firm to deposit the performance security within stipulated time the purchase reserves the right to cancel the contract. Performance security submitted by the bidder will remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier. No interest will be payable for "Performance Security". The details required for preparation of Performance Security are as under :-

The GSTIN No. of this Academy is **36H YDS0 4814 F1D2**.

Bank Details :-

- (i) Branch : State Bank of India, Shivarampally.
- (ii) In favour of : Director NPA Administration
- (iii) Account No. : 52020141259
- (iv) IFSC Code : SBIN0020335

21. **Right to Cancel the Order**. The Director, SVP National Police Academy reserves the right to cancel the work order without any financial repercussion on either side and without seeking the consent of the supplier at any stage of purchase process. No further correspondence in this matter will be entertained.

22. **Demonstration of Offered Project**. The bidder should provide demonstration of service offered, in case the TPC so desires. Failure to offer demonstration shall entail rejection of bid forthwith.

23. **Arbitration Proceedings**. Any dispute arising out of the contract at any time between the parties hereto touching or arising out of this contract shall be referred to an arbitrator to be nominated by the Director, SVP National Police Academy and the decision and award of such arbitrator shall be final and binding upon the parties hereto and the provision of the Indian Arbitration Act 1996 shall apply to the Arbitration proceedings.

24. **High Court for Settlement of Dispute**. If the dispute between the parties not settled by the Arbitrator, it should be subject to the jurisdiction of the High Court of Judicature at Hyderabad.

25. **Death of Contractor (Sole Proprietor)**. In case of death of a contractor or sole proprietor of a firm, his/her legal heir (s) may be permitted to operate the contract already approved in favour of the deceased and are operational or operating the current contract approved in favour of the deceased :-

- (a) Death Certificate of the deceased contractor.
- (b) Willingness certificate on an affidavit that the legal heir (s) and accredited agent (s) is/are willing to continue the operation of existing contract (s) at the existing terms and condition of the contract.

(c) Legal Heir Certificate/Succession Certificate from the Court of Law.

26. **Payment of Bills.**

(a) The bidder should submit bill in triplicate to the Academy immediately after completion of upgradation for payment.

(b) Bills submitted by the contractor will have GSTIN printed on it. Any bill received without GSTIN printed on it will be liable to be rejected.

(c) All payment would be made through e-payment. Hence, organisation details in specified format must be submitted alongwith the bills.

27. **Opening and Evaluation of Technical Bids.**

(a) The Tender Committee appointed by the Competent Authority of Academy will open all Technical Bids in the first instance on the appointed date and time at SVP NPA Hyderabad.

(b) During evaluation of the bids, the purchase committee may, at its discretion, ask the Bidder for clarifications of its bid. The clarification of the bidder shall be in writing.

(c) No bidder shall contact the committee member on any matter relating to its bid from the time of the bid opening to the time the purchase order is placed. If the Bidder wishes to bring additional information to the notice of the Purchaser it should be done in writing.

(d) Any effort by a bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or purchase order decision will result in rejection of the bid.

(e) The results of the evaluation of the Technical Bids along with the date of opening of the Financial Bids will be uploaded in the portal. The purchase committee may at its option to choose to open the financial bids immediately after the opening and evaluation of the Technical Bids.

28. **Opening and evaluation of Financial Bids.**

(a) The Tender Processing Committee will open the financial bids in favour of vendors who successfully qualified technical bid.

(b) Arithmetical errors will be rectified on the following basis:- If there is a discrepancy between words and figures, the lower of the two shall be taken as the bid value. If the bidder does not accept the correction of errors, as aforesaid, its bid will be rejected, penal action as per provision will be initiated.

29. **Eligibility Conditions.**

(a) The bidding firm should have the capability to provide the service in time as and when order placed and upgradation should be completed within 45 days from the date of issue of order.

(b) The Vendor should preferably be an entity registered in India.

(c) The firm/agency/distributor/wholesaler with sound financial position are only eligible to submit the tender form (stability may be assessed through IT Return & annual turnover)

30. **Taxes and Duties**. Firms shall be entirely responsible for all taxes, duties, license, fees etc. Incurred until delivery of contracted software/services to the Academy.

Digitally signed by R
JAYANTHI
Date: Mon Nov 15 13:09:25 IST
2021
Reason: Approved

Administrative Officer (Admn.)
SVP NPA, Hyderabad

Copy to: Programmer with a request to please get the above requirement posted in NPA Website and provides a link

Gram: 'POLACADEMY' [e-mail:administrator@svpnpa.gov.in](mailto:administrator@svpnpa.gov.in) Tel: +91-040-24015151 to 24015158 Fax: 91-040-24015179

Technical Specifications for upgradation of NVR & Displays in CCTV Control room -SVPNPA**ANNEXURES**

ANNEXURE	DESCRIPTION		Quantity
1.	OEM ELIGIBILITY CRITERIA.		
2.	Bidder Eligibility Criteria.		
A.1	NVR, VMS and STORAGE.		
	A1.1	Specifications for Network Based Video Recorder	05 Nos
	A1.2	Video Management Software Specifications.	05 Nos
	A1.3	Video Decoder	05 Nos
A.2	INDUSTRIAL GRADE 24/7 OPERATION 4K DISPLAY MONITORS		09 Nos

ANNEXURE-1

OEM Eligibility Criteria – IP Based CCTV:

- OEM must have experience of manufacturing of CCTV Products from last 15 years. The OEM of CCTV equipment should be in surveillance business for at least ten years as of 31 March 2021 and should be registered under Companies Act, 1956. **Proof of Registration should be attached.**
- OEM should have Technical Support Centre in India and also a regional support centre in southern India. Address proof of **the technical support centre with phone no. in the name of OEM to be attached.**
- OEM should not be blacklisted by any Ministry of Government of India or any other Government/PSU or any other government department at time of the bidding. **A certificate on the company letter head be attached.**
- MAC address of Hardware should be registered in the name of the OEM supplying the CCTV product.
- OEM must provide the authorizations to the bidding company for the support extended to successfully execute the work as per the conditions laid down.
- OEM should provide 3 years warranty and 7 years spare part support for the models quoted.

ANNEXURE-2

Bidder Eligibility Criteria for IP Cameras.

In addition to the above mentioned certification the bidder (who is not an OEM) shall have to furnish following documents along with technical bid:

- The bidder must attach a **Authorization certificate from OEM to bid in the tender.**
- The bidder company should be incorporated under the company's act 1956 and should be in business for last 10 years. **Proof of this should be attached along with the technical bid.**
- Bidder should have GST, PAN, EPF registration with concerned authorities in India. **Copy of GST, PAN & EPF registration should be attached.**
- The bidder firm should not be defaulted / black listed/ banned by any Govt/ Public Sector organization / department in India. **A certificate on the bidder's company letter head to be attached.**
- Bidder must have Annual Financial Turnover during the last 3 years, ending 31st March 2021 of at least INR 7.5 Crore. **Proof to be attached**
- The bidder should have experience with IP CCTV Cameras and Storage solutions. Supporting purchase order copies or completion certificates to be attached which were last 5 years.
- In view of the prominence of these installations, the bidder is expected to provide the following documents in writing on respective letterheads or from the OEM, as required.
- **THREE Years warranty on the supplied equipment and accessories with min support of service for at least seven years thereon.(OEM Certificate)**
- Bidder should provide a letter of undertaking to attend the breakdown or service calls within 06 Hours from the time of reporting and 24 hours for its resolution.**(Bidder Certificate).**
- The Academy has nearly 144 cameras along the perimeter which are connected with the control room. The successful bidder shall ensure to integrate the same with upgraded infrastructure. Any financial implications and technical challenges to be resolved, are within the scope of the vendor. No additional amount will be paid other than the bid value quoted by the successful bidder.

ANNEXURE-A1.1

Specifications for Network Based Video Recorder: (05 nos)

Sl. No:	Network Video Recorder	Technical Specification	Compliance (YES/NO)
1	Processor	Intel Xeon Processor E-2226GE (12 MB Cache, 3.4 GHz) processor	
2	Cache	12 MB Intel® Smart Cache	
3	Memory	16GB DDR4-2666 2Rx8 ECC UDIMM	
4	HDD slots	8 slots, 3.5 in. SATA storage trays	
5	HDD capacity to be provided	12 TB/slots to be provided with 96TB raw space	
6	SSD for OS	2 x 120 GB SSD drives in RAID-1 configuration	
7	OS	Windows Storage Server 2016 or latest	
8	RAID support	RAID-5 / 6	
9	Protocol	iSCSI	
10	B/W capacity	550 Mbit/s	
11	Network	Dual Intel i210AT Gigabit LAN (teamed)	
12	Hot swappable HDDs	Yes	
13	Hot swappable power supply, fans	Yes	
14	Power Consumption	220W-280W	
15	Power Input	240VAC	
16	Form Factor	2 U Rack Mount	
17	USB Ports	Front: 2 USB 2.0 ports, Rear: 3 USB 3.1 ports, 1 USB-C Port	
18	Dimensions (H x W x D)	89 x 437 x 648 mm (3.5 x 17.2 x 25.5 in)	
20	Operating Temperature	+10°C to +35°C (+50°F to +95°F)	
21	Non-operating Temperature	-40°C to +70°C (-40°F to +158°F)	
22	Operating Relative Humidity	8 to 90%, non-condensing	
23	Non-operating Relative Humidity	5 to 95%, non-condensing	
24	Quality	This product shall be manufactured by a firm whose quality system is in compliance with the I.S. /ISO 9001/EN 29001, QUALITY SYSTEM.	
25	SNMP	Simple Network Management Protocol is a component of the Internet Protocol Suite as defined by the Internet Engineering Task Force (IETF). SNMP is used in network management systems to monitor network-attached devices for conditions that warrant administrative attention.	

ANNEXURE-A1.2

Specifications for Video Management Software: (05 nos)

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

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

	footage to enable operator to search through previous events without any pre-configuration of video analytic events.	
50	The video management system shall support to confirm the authenticity of recorded video data. The video management system shall support to check hash values against recorded video data of cameras, which provide a recording stream with hash values signed by its certificates	
51	The video management system shall be able to encrypt recorded video data using AES-256 without reducing the performance (number of cameras and throughput) of the recorder.	
52	The video management system is listed as an ONVIF Profile-S conformant product on the ONVIF website.	
53	The system shall protocol every event and alarm in an SQL database. The alarm entry shall contain the camera titles that have been recorded due to this alarm	
54	The exported data in MP4 or MOV format may be played back using standard software, for example VLC.	

ANNEXURE-A1.3

Specifications for Video Decoder: (05 nos)

1.A. General Description:

- 1.A.1. As the application requires, the H.265/H.264 UHD/MP video decoder specified shall be capable of functioning on data networks, such as Ethernet LANs and over the Internet.
- 1.A.2. The H.265/H.264 UHD/MP video decoder shall be capable of decoding ultra-high definition (4K UHD) streams using H.265 or H.264 compression technology at up to 30 fps.
- 1.A.3. The H.265/H.264 UHD/MP video decoder shall be capable of decoding mega-pixel (MP) streams using H.265 or H.264 compression technology at up to 30 fps.
- 1.A.4. The H.265/H.264 UHD/MP video decoder shall be capable of decoding high definition (HD) streams using H.265 or H.264 compression technology at up to 60 fps.
- 1.A.5. The H.265/H.264 UHD/MP video decoder shall be capable of decoding multiple standard definition streams simultaneously.
- 1.A.6. The H.265/H.264 UHD/MP video decoder shall be capable of directly driving up to two (2) HD or 4K UHD display devices.
- 1.A.7. The H.265/H.264 UHD/MP video decoder shall be capable of displaying VCA metadata overlays.
- 1.A.8. The H.265/H.264 UHD/MP video decoder shall be capable of displaying red alarm frames around each video window.
- 1.A.9. [The H.265/H.264 UHD/MP video decoder shall include an IP Matrix functionality.
 - 1.A.9.a. The decoder shall support a USB keyboard KBD-UXF.
 - 1.A.9.b. The decoder shall support up to 32 cameras for use in the IP Matrix configuration.
 - 1.A.9.c. The decoder shall support camera sequences.
 - 1.A.9.d. The decoder shall support favorite views to be stored and recalled via the USB keyboard.
 - 1.A.9.e. The decoder shall support being grouped in a larger IP Matrix consisting of up to four (4) decoders, consolidating all cameras up to 128 cameras for use in the IP Matrix configuration, and up to four (4) operators with keyboards, one (1) keyboard connected per decoder.
 - 1.A.9.f. The decoder shall support an automatic logout function for IP Matrix operation.]
- 1.A.10. The H.265/H.264 UHD/MP video decoder shall support de-warping of panoramic camera streams.
- 1.A.11. The H.265/H.264 UHD/MP video decoder shall be capable to provide bi-directional audio G.711 for the video stream shown in single view on the first monitor.
- 1.A.12. The H.265/H.264 UHD/MP video decoder shall support the following security options:
 - 1.A.12.a. Two (2) levels of password protection to prevent unauthorized connection or configuration changes to the unit.
 - 1.A.12.b. Secure communication via HTTPS using minimum TLS 1.0 with AES encryption with 128bit or 256-bit keys for each communication channel – video, audio, or serial I/O – for total data protection.
- 1.A.13. The H.265/H.264 UHD/MP video decoder shall provide overheat protection.
- 1.A.14. The H.265/H.264 UHD/MP video decoder shall be powered by an external power supply.
- 1.A.15. The H.265/H.264 UHD/MP video decoder shall provide overheat protection.
- 1.A.16. The H.265/H.264 UHD/MP video decoder shall provide a power switch.
- 1.A.17. The H.265/H.264 UHD/MP video decoder shall provide a power indicator LED.
- 1.A.18. The H.265/H.264 UHD/MP video decoder shall provide an indicator LED for SSD activity.
- 1.A.19. The H.265/H.264 H.265/H.264 UHD/MP video decoder shall provide dual USB 3.0 interfaces.
- 1.A.20. The H.265/H.264 UHD/MP video decoder shall provide a Kensington lock for physical security.
- 1.A.21. The H.265/H.264 UHD/MP video decoder shall be provided including VESA mount accessories.

1.A.22. The H.265/H.264 UHD/MP video decoder specified shall be provided by the manufacturer complete with power supply, installation guide, and safety instructions.

1.B. Decoding

1.B.1. The H.265/H.264 UHD/MP video decoder shall offer the following compression options:

- 1.B.1.a. H.265 / HEVC (ISO/IEC 23008-2)
- 1.B.1.b. H.264 (ISO/IEC 14496-10)
- 1.B.1.c. MPEG-4

1.B.2. The UHD/MP video decoder shall be capable of decoding the following stream options and display it at a single 1080p@60Hz display at 25°C / 77°F, desktop standing:

- 1.B.2.a. Four (4) H.265/H.264 2160p30 streams at 32 Mbps
- 1.B.2.b. Ten (10) H.265/H.264 1080p30 streams at 8 Mbps
- 1.B.2.c. Eighteen (18) H.265/H.264 720p30 streams at 4 Mbps
- 1.B.2.d. Twenty-eight (28) H.265/H.264 standard definition streams at up to 2 Mbps

1.B.3. The UHD/MP video decoder shall be capable of decoding the following stream options and display it at dual 1080p@60Hz displays at 45°C / 113°F, upright VESA mount:

- 1.B.3.a. Two (2) H.265/H.264 2160p30 streams at 32 Mbps
- 1.B.3.b. Six (6) H.265/H.264 1080p30 streams at 8 Mbps
- 1.B.3.c. Ten (10) H.265/H.264 720p30 streams at 4 Mbps
- 1.B.3.d. Sixteen (16) H.265/H.264 standard definition streams at up to 2 Mbps

1.B.4. The H.265/H.264 UHD/MP video decoder shall be capable of encoding and decoding G.711 audio.

1.B.5. System Specifications The H.265/H.264 UHD/MP video decoder shall be based on the Intel seventh generation Core i3 CPU.

1.B.6. The H.265/H.264 UHD/MP video decoder shall include a 64 GB SSD module as boot medium for operating system and applications.

1.B.7. The H.265/H.264 UHD/MP video decoder shall offer a Gigabyte Ethernet port.

1.B.8. The H.265/H.264 UHD/MP video decoder shall run a tailored Microsoft Windows 10 IoT Enterprise operating system.

1.B.9. The H.265/H.264 UHD/MP video decoder shall include OEM Monitor Wall software based on OEM Video SDK embedded in its firmware.

1.B.10. The H.265/H.264 UHD/MP video decoder firmware shall be upgradeable remotely.

1.C. Monitor Support

1.C.1. The H.265/H.264 UHD/MP video decoder shall provide one (1) HDMI output and one (1) DP monitor output with both outputs usable simultaneously.

1.C.2. The H.265/H.264 UHD/MP video decoder shall be capable of switching screen layouts independently on each monitor managed by the controlling video management system.

1.D. Mounting

1.D.1. The H.265/H.264 UHD/MP video decoder shall be equipped with screw-on stands for table-top use.

1.D.2. The H.265/H.264 UHD/MP video decoder shall be capable of being mounted directly to the back of a monitor using the VESA mounting options of 100 mm (3.937 in.).

1.E. Electrical

1.E.1. Power Supply: Wide-range, external, included in the box

1.E.2. Input Voltage: 100 to 240 VAC, 50/60 Hz

1.E.3. Power Consumption: Approximately 15 W, 60 W maximum

1.F. Video:

1.F.1. Video Outputs: 2 simultaneously

1.F.2. Connectors: HDMI (1), DP via USB-C (1)

1.F.3. Video Compression Standards:

- 1.F.3.a. H.265 / HEVC (ISO/IEC 23008-2)
- 1.F.3.b. H.264 (ISO/IEC 14496-10)
- 1.F.3.c. MPEG-4

- 1.F.4. Data Rates:
 - 1.F.4.a. MP: Up to 32 Mbps, single stream
 - 1.F.4.b. 4K UHD: Up to 32 Mbps, single stream
 - 1.F.4.c. HD: Up to 8 Mbps, single stream
 - 1.F.4.d. SD: Up to 6 Mbps per stream
- 1.F.5. GOP structure: I, IP, IBBP
- 1.F.6. Monitor Resolutions:
 - 1.A..a. 1920 x 1080 (HD) at 60 Hz
 - 1.A..b. 3840 x 2160 (UHD) at 60 Hz
- 1.G. Network
 - 1.G.1. Ethernet: 10/100/1000 Base-T, auto-sensing, half/full duplex, RJ45
 - 1.G.2. Protocols: RTP, RTSP, Telnet, UPD, TCP, IP, HTTP, HTTPS, DHCP, IGMP V2/V3, ICMP, ARP, SNTP, digest authentication
 - 1.G.3. Encryption: min. TLS 1.0 including AES up to 256 bit key length
- 1.H. Control:
 - 1.H.1. Software Update: Remote programmable
 - 1.H.2. Configuration: OEM Configuration Manager
 - 1.H.3. Operation: OEM Video Management System or OEM Video Client
- 1.I. Mechanical
 - 1.I.1. Dimensions without stands (H x W x D): 47.3 x 150.6 x 186 mm
(1.862 x 5.929 x 7.323 in)
 - 1.I.2. Weight: Approximately 1.7 kg (3.7 lb)
 - 1.I.3. VESA Mount: 100 x 100 mm (3.937 x 3.937 in.)
- 1.J. Environmental:
 - 1.J.1. Operating Temperature: 0°C to +50°C (+32°F to +122°F) ambient temperature
 - 1.J.2. Humidity: 0 to 90% atmospheric humidity, non-condensing
 - 1.J.3. Thermal Value: Approximately 51 BTU/h, 205 BTU/h maximum

ANNEXURE-A2

**Specifications for 4K Ultra HD HDR Professional Display Monitors:
(09 nos)**

	Technical Parameter	SPECIFICATIONS	Compliance (YES/No)
Panel	Brightness (cd/m2)	440 nits or better	
	Display Resolution	3840X2160	
	Active Display area	55 Inches	
	Response Time	10 ms or better	
	Dynamic Contrast Ratio	300,000:1 or better	
	Dimming Type	Frame Dimming	
	Motion Enhancer	Motion flow XR,240Hz (Native 60Hz) with Auto Mode	
	Backlight Type	Direct LED or better	
Video	HDR Compatibility	HDR10 / HLG / Dolby Vision	
Weight	Display Only (kg)	Less than 17 Kgs	
Power	Rated Power consumption (W)	200 Watts or better	
Display Features	Dimming Type	Local Dimming	
	Viewing Angle(Right/Left)	178 (89/89) degree or better	
	4K Processor	4K HDR Processor X1	
	Panel Refresh Rate(Native Hertz)	50Hz or better	
Professional Features	Operating System	Android 10	
	Wi-Fi direct	Yes	
	Wi-Fi Certified	Yes	
	Wi-Fi Standard	a/b/g/n/ac	
	Wi-Fi Frequency	2.4 Ghz/5 GHz (for Wi-Fi Direct: 2.4 GHz Only) or better	
	Apple AirPlay	Should be available	
	Chrome cast	Should be built in	
	Wireless LAN	Should be Integrated	

	IP Control	Yes	
	Multicast/IPTV	Should be available	
	HTML 5 Option	Yes	
	Operation Time	24 X 7	
	RS-232C Control	1	
Inputs & Outputs	Composite Video Input(s)	1	
	HDMI Inputs Total	4	
	Digital Audio	1	
	Headphone Output	1	
	USB Ports	2	
	Ethernet Inputs	1	
	RS-232C Input(s)	1	
	Speakers	Min 20W	

BID SECURITY DECLARATION FORM

Date: _____ Tender No. _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

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

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

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

Signed: (insert signature of person whose name and capacity are shown)

in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)