



Dr. NTR UNIVERSITY OF HEALTH SCIENCES

Tender Document For

**Providing Central web streaming setup at the Command Control room at
Dr. NTR UHS, Vijayawada (2nd call)**

TENDER NO: 09A/We/TS/DM1/25

Dr. NTR UNIVERSITY OF HEALTH SCIENCES, VIJAYAWADA

NOTICE INVITING TENDER (Online version)

Sl.No.	Description	
1.	Department Name	Dr. NTR University of Health Sciences, Vijayawada
2.	FILE / NIT Number	09A/We/TS/DM1/25
3.	Tender Subject	Providing Central web streaming setup at the Command Control room at Dr. NTR UHS, Vijayawada
4.	Cost of Tender Document	5900/-
5.	Tender Type	Open
6.	Tender Category	Products
7.	EMD Amount for provisions(INR)	Rs. 1,00,000/- (Rupees One Lakh Only)
8.	EMD payable:	Demand Draft drawn in favour of the Registrar, Dr. NTR UHS, Vijayawada
9.	Bid Document Downloading Start Date	05.09.2025 at 10.30 AM
10.	Bid Document Downloading End Date	18.09..2025 at 12.00 PM
11.	Last Date & Time for Receipt of Bids	18.09.2025 at 2.00 PM
12.	Technical Bid Opening Date and Time(Qualification and Eligibility Stage)	18.09.2025 at 3.00 PM
13.	Price Bid Opening Date and Time (Financial Bid Stage)	.09.2025 at 11.00 AM
14.	Place of Tender Opening	Registrar's chamber, Dr. NTR UHS, Vijayawada.
15.	Tender Inviting / Opening authority	Registrar, Dr. NTR UHS, Vijayawada
16.	Address/E-mail id	ntruhsengineers@gmail.com
17.	Contact Details/Telephone	8978900570
18.	<u>Eligibility Criterion</u>	<p>The bidder should possess all requisite documents, registrations etc,. The bidder should possess Certificates like</p> <ol style="list-style-type: none">1. The bidder should be a company established in India and should be in existence for the last 5 years2. The bidder should have average annual turnover of Rs 5 crore or higher during the last 3 Financial years3. The bidder must be ISO 9001 and ISO 27001 or higher certified4. The bidder must have successfully

		<p>implemented in 4 projects in providing live remote monitoring during the last 4 Years as on day of bidding in India</p> <ol style="list-style-type: none"> 5. Out of the 4 projects at least one must be in the domain of Centralized remote monitoring, management and analytics on existing cameras for Examination related activities in educational institutions, colleges connecting more than 1500 cameras for monitoring, management and analytics. This must include automatic centralized cloud storage from all exam centers for audit/archival 6. The bidder should possess experience in implementing the proposed solution in any Medical University in India related to live streaming of examination using existing cameras covering at least 30000 candidates from minimum 100 centers for a minimum period of 4 years as on bid calling date. 7. The proposed solution covering both audio, video streaming, recording, storage and AI video analytics must be from the same OEM 8. The proposed solution should have been certified by STQC for cyber security before the bid calling date 9. Bidder should NOT have been blacklisted by any state government / central government entities from participating in their projects 10. The bidder should submit Manufacturer Authorization Form specific to this bid, mentioning the bid number for the video monitoring software and the videowall controller. Consortium is not permitted. <p>In case of non-submission of these certificates, the Registrar, Dr. NTR UHS, Vijayawada reserves the right to take any appropriate action including the cancellation of tender of the respective bidder. In</p>
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		this regard the decision of The Registrar, Dr. NTR UHS, Vijayawada is final and binding on the bidders without any recourse.
19.	<u>Procedure for Bid Submission</u>	<ol style="list-style-type: none"> 1. Bids shall be submitted online. 2. The participating bidders in the tender should register themselves free of cost on e-procurement platform in the website www.apecurement.gov.in 3. The bidders who are desirous of participating in e-procurement shall submit their technical bid, financial bid as per the standard format available at the e-market place. The bidders should scan and upload the below mentioned documents and submit all the hard copies duly attested to The Registrar, Dr. NTR UHS, Vijayawada on or before the schedule date and time of opening the technical bid. 4. The bidder should be a company established in India and should be in existence for the last 5 years 5. The bidder should have average annual turnover of Rs 5 crore or higher during the last 3 Financial years 6. The bidder must be ISO 9001 and ISO 27001 or higher certified 7. The bidder must have successfully implemented in 4 projects in providing live remote monitoring during the last 4 Years as on day of bidding in India 8. Out of the 4 projects at least one must be in the domain of Centralized remote monitoring, management and analytics on existing cameras for Examination related activities in educational institutions, colleges connecting more than 1500 cameras for monitoring, management and analytics. This must include automatic centralized cloud storage from all exam centers for audit/archival 9. The bidder should possess experience in implementing the proposed solution

		<p>in any Medical University in India related to live streaming of examination using existing cameras covering at least 30000 candidates from minimum 100 centers for a minimum period of 4 years as on bid calling date.</p> <p>10. The proposed solution covering both audio, video streaming, recording, storage and AI video analytics must be from the same OEM</p> <p>11. The proposed solution should have been certified by STQC for cyber security before the bid calling date</p> <p>12. Bidder should NOT have been blacklisted by any state government / central government entities from participating in their projects</p> <p>13. The bidder should submit Manufacturer Authorization Form specific to this bid, mentioning the bid number for the video monitoring software and the videowall controller. Consortium is not permitted.</p> <p>NOTE: After Tendering, all Bidders should submit the attested copies of the uploaded certificates along with original EMD as specified above to Registrar, Dr. NTR UHS, Vijayawada on or before the scheduled date and time of opening of Technical Bids, failing which their tender will be rejected. Transaction fee on e-Procurement Platform: All the participating bidders shall pay a transaction fee (non-refundable) as mentioned in the NIT payable to M/s APTS, Vijayawada and through on line. (0.03% of estimate contract value + service tax).It is mandatory for all the participant bidders from 1st January 2006 to pay a Non-refundable Transaction fee electronically to the M.D., A.P.T.S, Vijayawada by the service provider through "Payment Gateway Service on E-Procurement platform".</p> <p>NOTE : The Bidder shall authenticate the bid with</p>
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		his digital certificate for submitting the bid electronically on eProcurement Platform and the bids not authenticated by Digital certificate of the bidder will not be accepted on the eProcurement platform.
20.	Transaction Fee Payable to	The M.D., APTS, Vijayawada (ON LINE)
21.	General Terms and Conditions	AS PUBLISHED IN THE NOTICE INVITING TENDER.

REGISTRAR

Dr. NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

PROCEDURE FOR BID SUBMISSION ON e-Procurement PLAT FORM (e-Tendering):

1. The bidder shall submit his response through Bid submission to the tender on e-Procurement platform at www.eprocurement.gov.in by following the procedure given below. The bidder would be required to **register on the e-procurement market place www.eprocurement.gov.in** or [https:// tender.eprocurement.gov.in](https://tender.eprocurement.gov.in) and submit their bids online. **Offline bids shall not be entertained** by the Tender Inviting Authority for the tenders published in e-procurement platform.
2. The bidders shall submit their eligibility and qualification details, **Technical bid, Financial bid** etc., in the online standard formats displayed in e-Procurement web site. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their eligibility criteria/technical bids and other certificate/documents in the e-Procurement web site. The bidder shall sign on the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity. The bidder shall attach all the required documents for the specific tender after uploading the same during the bid submission as per the tender notice and bid document.
3. **Registration with e-Procurement platform:** For registration and online bid Submission, bidders may contact HELP DESK of <http://www.apecurement.gov.in>. contact no. 040-39999700/701
4. **Hard copies:**
 - i) Attested copies of all original hard copies of the uploaded scanned copies, D.D towards EMD by participating bidders must submit along with tender document to the tender inviting authority **before scheduled date and time of the opening of the Technical bid**, otherwise the tender will be rejected on online.
 - ii) All the bidders shall invariably upload the scanned copies of DD in e-Procurement system and this will be the primary requirement to consider the bid responsive.
 - iii) The department shall carry out the technical evaluation solely based on the uploaded certificates/documents, DD towards EMD in the e-Procurement system and open the price bids of the respective bidders after evaluation of technical bids.
 - iv) The department will notify the successful bidder for submission of original hardcopies of all the uploaded documents, DD towards EMD prior to entering into agreement.
 - v) The successful bidder shall invariably furnish the original DD towards EMD, Certificates/Documents of the uploaded scan copies to the Tender Inviting Authority before entering into agreement, in personal, the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The department will not take any responsibility for any delay in receipt/non-receipt of original DD towards EMD, Certificates/Documents from the successful bidder before the stipulated time. On receipt of documents, the department shall ensure the genuineness of the DD towards EMD and all other certificates/documents uploaded by the bidder in eProcurement system, in support of the qualification criteria before concluding the agreement.

5. The bidder is requested to get a confirmed acknowledgement from the Tender Inviting Authority a proof of Hardcopies submission to avoid any discrepancy.
6. The G.O. Ms. No. 174 –I & CAD dated: 1-9-2008 Deactivation of Bidders, If any successful bidder fails to submit the original hard copies of uploaded certificates/documents, DD towards EMD within stipulated time or if any variation is noticed between the uploaded documents and the hardcopies submitted by the bidder, as the successful bidder will be suspended from participating in the tenders on e-Procurement platform for a period of 3 years. The e-Procurement system would deactivate the user ID of such defaulting bidder based on the trigger/recommendation by the Tender Inviting Authority in the system. Besides this, the department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the government. Other conditions as per tender document are applicable.

7. Payment of Transaction Fee:

It is mandatory for all the participant bidders from 1st January 2006 to electronically pay a Non-refundable Transaction fee to the M.D., APTS, Vijayawada the service provider through "Payment Gateway Service on E-Procurement platform". The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any bank and Direct Debit facility/Net Banking of ICICI Bank, HDFC, Axis Bank to facilitate the transaction. This is in compliance as per G.O.Ms.13 dated 07.05.2006. A service tax of 12.36% + Bank Charges for Credit Card Transaction to the M.D., APTS, Vijayawada shall be applicable.

8. Corpus Fund:

As per GO MS No.4 User departments shall collect 0.04% of ECV (estimated contract value) with a cap of Rs.10,000 (Rupees ten thousand only) for all works with ECV upto Rs.50 crores, and Rs.25,000/- (Rupees twenty five thousand only) for works with ECV above Rs.50 crores, **from successful bidders** on e-Procurement platform before entering into agreement / issue of purchase orders, towards e-procurement fund in favour of Managing Director, APTS. There shall not be any charge towards e-Procurement fund in case of works, goods and services with ECV less than and upto Rs. 10 lakhs.

9. Tender Document:

The bidder is requested to download the tender document and read all the terms and conditions mentioned in the tender Document and seek clarification if any from the Tender Inviting Authority. Any offline bid submission clause in the tender document could be neglected.

The bidder has to keep track of any changes by viewing the Addendum/Corrigenda issued by the Tender Inviting Authority on time-to- time basis in the E-Procurement platform. The Department calling for tenders shall not be responsible for any claims/problems arising out of this.

10. Bid Submission Acknowledgement:

The bidder shall complete all the processes and steps required for Bid submission. The system will generate an acknowledgement with a unique bid submission number after completing all the prescribed steps and processes by the bidder. Users may also note that the bids for which an acknowledgement is not generated by the e-Procurement system are treated as invalid or not saved in the system. Such invalid bids are not made available to the Tender Inviting Authority for processing the bids. The Registrar, Dr. NTR UHS, Vijayawada is not responsible for incomplete bid submission by users.

TENDER CONDITIONS FOR “Providing Central web streaming setup at the Command Control room at Dr. NTR UHS, Vijayawada”

1. Online (e-Tendering) tenders are invited for **“Providing Central web streaming setup at the Command Control room at Dr. NTR UHS, Vijayawada”** The Registrar, Dr. NTR UHS, Vijayawada is desirous to have this tender in two bids i.e., (1) Technical bid and (2) Financial bid. All Tenderers should submit the attested copies of all scanned and uploaded certificates on online including ORIGINAL EMD to the Tender Inviting Authority on or before scheduled date and time of opening of the Technical bid as mentioned in NIT. The financial bids of those tenderers who are technically qualified alone, will be opened on the date and time as mentioned in the NIT by the Registrar, Dr. NTR UHS, Vijayawada. Or any other officer authorized by the Registrar, Dr NTR UHS, Vijayawada. The University may extend the last date by issuing an amendment in which case all rights and obligations of the Registrar, Dr. NTR UHS, Vijayawada and the tenderers previously subject to the original deadline will then be subjected to the new deadline. **SUBMISSION OF TENDER DOCUMENTS ON OFFLINE WILL NOT BE CONSIDERED.**
2. An amount of 1,00,000/- (Rupees One Lakh Only) is to be remitted as Earnest Money Deposit by way of an Account payee Demand draft drawn in favour of the [Registrar, Dr. NTR UHS, Vijayawada](#), in any scheduled bank and should scan and upload at the time of tendering. The EMD will be released only after successful completion of the warranty period. The EMD will not carry any interest.
3. The rate quoted should be inclusive of transportation labor charges, etc. and inclusive of all taxes. Further, Dr. NTR UHS, Vijayawada cannot issue statutory forms like Form C or Form D etc. and this should be taken into account by the supplier while quoting the rates to Dr. NTR UHS, Vijayawada.
4. **“Providing Central web streaming setup at the Command Control room at Dr. NTR UHS, Vijayawada”** shall be as per the specifications mentioned in the tender schedule (Annexure).
5. Negotiations will be made in case of necessity, with the lowest selected tenderer /tenderers and in this regard the decision of Registrar, Dr. NTR UHS, Vijayawada shall be final and binding on the suppliers without any recourse.
6. The tender accepting authority i.e., the Registrar reserves the right either to reject any or all tenders without assigning any reason. In this regard the decision of Registrar, Dr. NTR UHS, Vijayawada is final and binding on the tenderer without any recourse. Further, it is

understood by both the parties to the tender and is specifically accepted by the tenderer when the tenderer files the tender before The Registrar, Dr. NTR UHS, Vijayawada the acceptance or rejection of the tender by The Registrar, or methodology adopted by University in short listing the companies for providing service or supply of material/materials or etc., shall not become a cause of action or ground to initiate any legal action before any Court or Courts of Law for obtaining any order, Injection, Direction etc., from the Hon'ble court or Courts to stall the proceedings in Dr. NTR UHS, Vijayawada .

7. Registrar, Dr. NTR UHS, Vijayawada reserves the right to accept or reject any tender and to cancel the tender process and reject all tenders at any time prior to the award of contract without thereby incurring any liability to the affected tenderer or any obligations to inform the affected tenderers, the grounds of acceptance or rejection.
8. Registrar, Dr. NTR UHS, Vijayawada reserves the right to charge penalty as decided by the Registrar or withhold payment for any under quality material supplied by the tenderer without prejudice to its other rights. In this regard, the decision of Registrar is final.
9. The prices quoted shall be fixed from the date of submission of tender to the date of completion of the contract of contract in all respects. **ANY REQUESTS FOR REVISION IN THE RATE OR RATES BY THE SUPPLIER SHALL NOT BE ENTERTAINED DURING THE RATE CONTRACT PERIOD.**
10. Penal clauses of the supplier whatsoever like payment of interest on delayed payment of bills etc. shall not be acceptable to University.
11. For breach of any of the above tender conditions by the approved tenderer, the E.M.D. and Security Deposit are liable to be forfeited duly blacklisting the Firm. Further, Non-performance of any of the contract provisions to the satisfaction of Dr. NTR UHS, Vijayawada will disqualify the tenderer to participate in the tenders for the next five (5) years, by disabling the digital certificate.
12. The successful tenderer shall be required to execute agreement. The Signatory should produce documentary evidence of empowering him to do so, if called upon at any time during the contract period. In case of change in the Authorized signatory it is binding on the supplier to inform the changes to the Dr. NTR UHS, Vijayawada.
13. The successful tenderer should execute an agreement on non-judicial stamp paper worth Rs.100/- agreeing to all the conditions of the contract. If the successful tenderer fails to execute the agreement within the time specified or withdraw the tender after the intimation of the acceptance of his tender by Dr. NTR UHS, Vijayawada or he is unable to undertake the contract due to any other reason, his contract will be cancelled and his E.M.D. shall be forfeited and he will also be liable for all damages sustained by the I Dr. NTR UHS, Vijayawada by reason of breach such as failure to supply/delayed supply including the liabilities to pay differences between the prices accepted by him and those ultimately paid for the procurement of the commodity. Such damages shall be assessed by the Registrar, Dr. NTR UHS, Vijayawada whose decision shall be final and shall be binding on the supplier.
14. The University reserves the right to terminate / amend / modify the contract without assigning any reason or advance notice to the tenderer/Supplier. Similarly, the terms of the tender may

be amended/modified by University if necessary, to ensure competitiveness and quality of procurement / service.

15. The EMD amount except the Approved tenderer/tenderers will be returned after the finalization of tender. The EMD amount in respect of second Approved tenderer will be returned after approved orders received from the competent authority and execution of agreement of first lowest bidder.
16. SUB-CONTRACTING: The contract supply awarded should be executed by the successful Tenderer/ bidder only and sub-contract of supply is not permitted.
17. The Supplier who apply for this tender has to furnish the declaration that they have not been black listed in any of the organizations. Any wrong declaration in this regard which comes to the notice at a later date will disqualify them from tendering in future in University and the tenders so received shall be automatically rejected.
18. No supplier shall be allowed at any time on any ground what so ever to claim revision or modification in the prices quoted by him, Conditions such as Subject to Availability Supplies will be made as and when supplies are received etc, will not be considered under any circumstances.
19. In the event of any dispute arising out of the tenders, such dispute would be subject to the jurisdiction of the High Court of Andhra Pradesh only.
20. *Quantity should be supplied within stipulated time, partly (or) as and when required (or) wholly as per the work order.*
21. The University will advise the successful tenderer to remit a further amount so that the amount along with E.M.D. will make up 5% of the value of the contract. The amount equivalent to 5% of the value of the contract shall be termed as Security Deposit and will be retained by the University as security deposit until successful completion of work and the Security Deposit will be released after completion of agreement period.
22. Security and insurance i.e., from loss / damage / theft or rain etc., shall be at the risk of the agency
23. Prices should be quoted inclusive of all taxes, transportation and labor charges etc.,
24. **Deductions:** Income Tax and if any other taxes would be deducted from the bill as per the Government norms
25. Transportation and labor should be arranged on their own. Damages, breakages etc., in transportation at the responsibility of the agency.
26. Rate contract may be entered with more than one bidder at the lowest rate for the given specifications to meet the demand of work.
27. Penalty: In case of default by successful bidder, the Registrar, Dr. NTR UHS, Vijayawada his option has right to impose the penalties that may be deemed fit to recover from the bidder and amount equivalent to that incurred without prejudice to his other rights including the right to

cancel the order without pre-notice, forfeit the security deposit or recover for damages for breach of contract.

28. This University will release payment on satisfactory certification of University authorities, after completion of work..
29. The technical specifications and configuration must be in accordance to the specifications stated in Annexure
30. Samples may be submitted for approval before deliveries are made.
31. On receipt of the amount towards security deposit, then the University shall issue a purchase order setting forth the conditions and terms with date of delivery etc., by Registered Post with Acknowledgement Due.
32. No price variation on any account will be allowed on the prices mentioned in purchase order and the rates quoted by are valid till completion of the work from the date of concluding agreement. The quantities are subject to change, which may increase or decrease as per requirement.
33. The University on receipt of consignment shall verify and set forth defective supplies, if any, in writing to the contractor within 30 (thirty) days from the date of receipt of supplies.
34. The supplies are to be made as per schedule given in the purchase order.
35. Supplies should be made in accordance with specifications and as per approved sample.
36. Supplies should commence within 15 (Fifteen) days after issue of work orders else non-refundable penalty of 2% on total contract value per week would be levied to a maximum 6% on total contract value.
37. All the materials are to be approved by the competent authority before they are delivered to Dr. NTR UHS. The materials should be as per Specifications. Any rejected materials are to be removed immediately.
38. *Quoted rates are applicable for a period of one year from the Date of Agreement.*

SCOPE OF WORK

Dr. NTR University of Health Sciences wants to strengthen the examination proctoring process through live web streaming of examination halls to the command center at university. Multiple brands of existing cctv cameras, both analog and ip from affiliated colleges need to be brought under the single monitoring platform for live monitoring at the University. Below is the scope of work for setting up the examination vigilance center with required hardware and software.

I. Central web streaming setup at the Command Control room at Dr. NTR UHS should include the following:

- a) Ability to inspect all examination rooms, question paper downloading room of all colleges under NTRUHS at the same time (with both audio and video of all rooms).
- b) Ability to control and zoom to specific candidate writing the exam.
- c) Should provide storage of all recorded video of examinations for 60 days for each exam session.
- d) Support up to 100 examination centres including examination and question paper downloading rooms
- e) Support minimum of 1750 CCTV cameras and maximum of 2500 cameras across affiliated colleges in the state of Andhra Pradesh.
- f) Central vigilance center setup with up to 10 monitors at the university to observe the examinations from the command control room.
- g) Solution should provide web-based UI for controlling and managing all the setup.
- h) Solution should not require any additional software or plugins for live view or recordings when viewed from mobile or desktop.
- i) Both analytics and live/recorded viewing components should be from the same OEM with ability to setup analytics for all examination centres from within the same web-based user interface.
- j) The monitoring and alerting solution should be based on Artificial Intelligence and Machine Learning.
- k) Remote squad at university should have a view of each examination room with minimum 720p HD resolution.

- l) Each examination room is to be fully covered by using both fixed and PTZ cameras (IP cameras).
- m) University authorities should have access to all the colleges.
- n) All access to real time or recorded content along with alerts and notifications should be from the same web-based platform – based on logged in user's permissions.
- o) Provide required systems, screens and any other hardware, software to enable remote squad to inspect all rooms from the University simultaneously.
- p) Authenticated users should be able to access from anywhere on their mobile devices.
- q) Provide Artificial Intelligence based event notifications along with ability to define, change the required parameters for each examination room from the central vigilance room.
- r) Setup the video wall and observer stations at the University as per given specifications
- s) Provide manpower as observers at the University for live remote monitoring during examinations
- t) University shall provide the necessary space and other necessary infrastructure such as (power supply, air conditioning, chairs and desks etc) along with local network, and internet connection of required bandwidth at the central vigilance center.

ELIGIBILITY CRITERIA

Sl. No.	Eligibility Criteria for the Bidder	Documentary Evidence to be attached	Compliance
1	The bidder should be a company established in India and should be in existence for the last 5 years	Letter of Incorporation and copy of GST registration to be submitted.	Yes/No
2	The bidder should have average annual turnover of Rs 5 crore or higher during the last 3 Financial years	Income Tax returns and audited financial statements of respective financial years to be enclosed.	Yes/No
3	The bidder must be ISO 9001 and ISO 27001 or higher certified.	Certificates to be attached.	Yes/No
4.1	The bidder must have successfully implemented in 4 projects in providing live remote monitoring during the last 4 Years as on day of bidding in India.		Yes/No
4.2	Out of the 4 projects at least one must be in the domain of Centralized remote monitoring, management and analytics on existing cameras for Examination related activities in educational institutions, colleges connecting more than 1500 cameras for monitoring, management and analytics. This must include automatic centralized cloud storage from all exam centers for audit/archival.	Purchase Orders or Satisfactory completion / Satisfactory running certificate from an authorized signatory clearly mentioning the solution being used need to be furnished to substantiate the claims.	Yes/No
4.3	The bidder should possess experience in implementing the proposed solution in any Medical University in India related to live streaming of examination using existing cameras covering at least 30000 candidates from minimum 100 centers for a minimum period of 4 years as on bid calling date.	Purchase Orders or Satisfactory completion / Satisfactory running certificate clearly mentioning the solution being used from an authorized signatory need to be furnished to substantiate the claims. The customer's name, scope of work, contact person's name and contact details need to be furnished.	Yes/No

4.4	The proposed solution covering both audio, video streaming, recording, storage and AI video analytics must be from the same OEM.	Declaration letter from the OEM	Yes/No
4.5	The proposed solution should have been certified by STQC for cyber security before the bid calling date.	STQC certification to be attached	Yes/No
5	Bidder should NOT have been blacklisted by any state government / central government entities from participating in their projects	Self-Declaration by the bidder(s) on the company letterhead. (shall be attested by notary)	Yes/No
6	The bidder should submit Manufacturer Authorization Form specific to this bid, mentioning the bid number for the video monitoring software and the videowall controller. Consortium is not permitted.	Manufacturer Authorization Form specific to this bid mentioning bid number to be submitted by bidder IF bidder is not the OEM of monitoring software.	Yes/No

TERM OF THE CONTRACT

The term of the contract is for 36 months from the date of award which can be extendable for further 24 months, if the services of tenderer found satisfactory by mutual consent with the same terms and conditions of the agreement.

However, the contract can be terminated by either party on three-months advance notice.

QUANTITIES, BID PRICES & PAYMENTS

- Quantities mentioned in the Price Schedule are minimum baseline which the bidder should quote for.
- The prices quoted in the Financial Bid shall be inclusive of all costs of incidental services such as transportation, insurance etc BUT exclusive of GST/any other statutory taxes and must be quoted clearly in Indian Rupees (INR).
- All components should be provided with 1 year warranty and Bidder shall quote clearly the AMC charges from 2nd year onwards.
- Prices quoted by the Bidder shall be fixed during the term of the contract which is 3 years from the date of award and shall not be subject to variation on any account, except for any changes in statutory taxes, duties or levies.
- Dr. NTR UHS and bidder can revise the price basing on mutual consent and discussion if the contract is extended after completion of its 3 year term. A Bid submitted with an adjustable price quotation will be treated as non-responsive

and will be rejected.

- Payment for the Annual Recurring Components will be made quarterly for the pro-rata amount within 45 days on satisfactory service report from the concerned Head of the Department.
- Any additional licenses (due to addition of cameras or new examination centres) utilized beyond the baseline number of licenses quoted in the bid during any quarter shall be paid pro-rata for that quarter on confirmation of utilization by the concerned Head of the Department.
- Bidder should quote for specified baseline minimum quantities in the price schedule.

Technical Specifications

Please attach compliance for each point and sub point separately. Any missing responses for compliance will be considered as non-compliant and liable for bid rejection.

1. Item 1 - AI Based Web Streaming Solution

S. No	Item	Specification	Compliance (Yes/No)
1	General	1. The system shall offer complete exam surveillance solution including Analytics that will be scalable to required numbers of cameras that can be added on a unit-by-unit basis	
		2. The system shall be seamlessly delivered from the cloud without need for any additional servers etc.	
		3. The user with administrative rights shall create clients (users) and give access to the software application features/cameras based on predefined user access rights.	
		4. The system should provide access directly from a browser without any additional software or plugins: a. Live display of cameras b. Live display of camera groups c. Control of PTZ cameras d. Playback of archived video e. Retrieval of archived video. f. Enable / disable camera audio	
		5. The Video Management Software shall have the capability of creating camera groups with the following functionalities: a. Each group shall have capability up to thousands of cameras b. It should be possible to include cameras from multiple exam centers in the same group c. A group can consist of some ip and some analog cameras d. Multiple users shall be able to view the same camera group simultaneously	

		e. It should be possible to dynamically create logical group hierarchy for example – village, taluk, district, state and country etc. or any other manner as desired.	
		6. The system shall provide status of all the cameras across all the exam centers in a dashboard view clearly identifying specific centers or cameras that are offline during the examination.	
		7. It shall be possible to search for recordings in the software by exam center, exam hall, date and time.	
		8. The system should support 150 examination centers and 2000 cameras to stream live simultaneously.	
		9. The system should be flexible to adapt to the number of examination centers for different examination cycles.	
		10. The cloud platform should be reputed and reliable such as AWS or Azure only.	
		11. The system should work on both Windows and Linux operating systems and should not be restricted to customized operating system.	
2	GUI Features	1. System should support 2 Factor Authentication by sending OTP on user's mobile for login.	
		2. Both audio and video of cameras should be available with facility to mute/unmute audio as desired.	
		3. The operator shall be able to control the recording playback with play, pause and a seek bar for moving back and forth.	
		4. The software shall provide management and control over the system using a standard PC mouse and keyboard without the need for any additional component such as joystick.	
		5. The software shall display all camera groups and cameras created in the system regardless of their physical location on the network.	
		6. The operator shall be able to control Pan, Tilt and Zoom patterns of P/T/Z Camera and also go to any of the PTZ presets.	
		7. The software shall support any form of IP network connectivity including LAN, WAN, Wireless LAN and VPN technologies.	
3	Video Recording Functions	1. Software shall support recording of video and audio for all the cameras.	
		2. Fault Tolerant Recording: If software & server(s) operation are interrupted, like power disconnection, once the server(s) are restarted, these shall automatically resume recording of any cameras which were recording prior to the interruption.	
		3. The software shall support network fault-tolerant recording such that if the network connection between the cloud servers and any exam center is unavailable due to congestion or internet disconnections etc, recordings should continue to happen at the center and once the connection is re-established the recordings	

		should automatically be uploaded to the cloud systems	
		4. All those recordings should get uploaded to the cloud servers without any manual intervention.	
		5. The system shall allow to download recordings of specific exam center and specific date and time from anywhere by authorized users.	
		6. The software shall allow to view the recordings of the camera in timeline view on hourly basis. User should be able to click on a desired minute of the hour and watch the recording from that minute.	
		7. Timeline view shall allow the user to view the events occurred at that minute in case of analytics enabled for that camera.	
		8. System should provide an option to create time lapse videos for any camera by specifying the date and time and frames per minute.	
4	Camera Support	1. The VMS solution shall support any ONVIF – profile ‘S’ compliant IP camera to be added for live and archive viewing.	
		2. System should support connecting existing analog cameras also seamlessly into the same platform providing a unified view along with other ip cameras.	
		3. Software shall provide ability to control the Pan-Tilt-Zoom (PTZ) functionality from the web page itself for PTZ cameras. for fixed cameras, system shall provide e-PTZ functionality.	
		4. Solution should be able to connect cameras to the cloud with or without availability of static ip at any location.	
		5. It should be possible to setup required video analytics on any connected camera irrespective of its make/model/functionality directly from the VMS system without any 3 rd party software.	
		6. Video Analytics should not depend on any camera feature and should be able to work on any connected camera including IP and Analog cameras.	
		7. System should connect with all existing cameras of different makes and models at exam centers.	
5	View	1. It should be possible to view cameras (both live and recorded) from desktop, laptop or mobile devices (android or iOS).	
		2. Should be able to watch directly through a browser, without any need to install additional software or plug-ins.	
		3. It should be possible to group cameras from multiple locations and watch them live together in a single window.	
		4. It should be possible to enable/disable audio for every camera in group view.	

		5. It should be possible to search archives (recorded videos) based on camera, date and time.	
		6. It should be possible to download the recorded video clips to local disk.	
		7. It should be possible for each observer to use a different layout from 2x2, 3x3, 4x4 or 8x8 so that up to 64 cameras can be viewed on single browser page.	
6	Security	1. The VMS system should be highly secure - it should be running on Secure Socket Layer (SSL) encrypted protocol with SHA256 bit encryption.	
		2. VMS solution should support two factor authentication for user login by integrating with external SMS gateways for future use.	
		3. All communication and data should be encrypted both in transit and at rest in the cloud.	
		4. The proposed system should be STQC certified for cyber security before the bid calling date.	
7	Access Control	1. It should be possible to create any number of users in the system.	
		2. VMS solution shall support user access control based on defined permissions.	
		3. Should be possible to define user access based on specific examination centre(s) or camera(s)	
		4. Should be possible to define which users have access to watch which cameras – both for live and recorded video	
8	Privacy	1. Administrator should have option to set privacy flag on any connected camera. Once set, the live view of the camera should be blurred for all other users.	
		2. It should be possible to set or unset the privacy flag on the fly as needed.	
		3. Setting the privacy flag should not impact recordings or any analytics that are configured on this camera and both recordings and analytics should function normally.	
9	Device Status	1. System shall continuously monitor the status of all its connected cameras that are being recorded.	
		2. Shall notify if any camera being monitored is down via email. It should be able to integrate with external SMS gateways to send SMS alert for device down for future use.	
		3. It shall notify if any camera that is being recorded is deliberately stopped.	
		4. System should provide an overview with the status of all connected cameras from all centers in the central dashboard whether online or offline.	
		5. System should also provide the utilization of the servers (CPU, RAM, Hard Disk etc) as well as gateway devices.	
10	Storage	1. System should support multiple storage mechanisms a. Cloud such as AWS, Azure etc	

		b. Local storage NAS, SAN etc.	
		2. When using cloud storage, system should provide flexibility to use multiple storage accounts so that camera storage can be distributed across those storage accounts.	
		3. Storage accounts can be mix and match across providers – i.e ability to distribute storage across multiple cloud providers.	
		4. System should provide option to define which storage is to be used at each location level.	
		5. Cameras from one location may use local storage whereas cameras from another location may use cloud storage	
		6. System should allow localization of data so that all data (camera archives and analytics event data) from a specific location/region stays within that location/region. However, the data should be available for viewing from anywhere by authorized users.	
11	Scalability	1. The VMS solution should be easily scalable to add more cameras or locations in future.	
		2. It should also be scalable to add additional analytics or anomaly detections in future.	
12	Video Analytics Software	1. Should provide integrated Video Analytics as part of the software simply by enabling required number of analytics licenses in the VMS software.	
		2. The video analytics should be based on the latest technologies such as Computer Vision and Neural Networks.	
		3. Analytics should not depend on any camera feature or functionality. It should be possible to setup any analytic on any camera including on analog cameras.	
		4. The following analytics should be integrated into the proposed VMS system: a. No Invigilator in room b. Movement in and out of room c. Invigilator Helping a student d. Loitering e. Intrusion Detection f. Crowd Formation g. Occupancy Monitoring h. Facial Recognition	
		5. System should allow to configure multiple analytics on the same camera.	
		6. Irrespective of number of analytics configured on the same camera, only one feed should be pulled from the exam centre in order to conserve the camera and bandwidth resources at the exam center.	

		<p>7. It should be possible to rotate analytics on different exam center cameras on different examination days using the same number of licenses.</p> <p>8. It should be possible to automatically schedule different analytics to run at different times on the same camera using one license.</p> <p>9. Software should be able to not only detect but classify objects – for example be able to recognize gender in case of a person; be able to recognize the type of vehicle - car, truck, auto, motorbike and cycle.</p> <p>10. In case of Face Recognition, system should be able to send out notifications for known persons only or strangers only or both</p> <p>11. System should be scalable to enable detection of newer anomalies as may be required by the University from time to time.</p> <p>12. The system should support Generative AI-based analytics and enable University to create and customize analytics on their own, based on specific operational requirements and scenarios.</p> <p>13. While configuring the analytic, system should allow for flexibility in terms of defining threshold values whether to trigger events or not.</p> <p>14. System should provide smart search option to locate specific person based on the shape, color or size etc across all the cameras.</p> <p>15. The proposed system should support integration with incident management solutions such as Immix/SureView for managing analytics events.</p>	
13	Notifications	<p>1. System should support multiple types of notifications:</p> <ol style="list-style-type: none"> Email SMS Web push <p>2. It should be possible for each user to choose if he/she wishes to receive notifications related to cameras for which he/she has permissions. Setting should apply to both camera health and analytic events notifications.</p> <p>3. For the same camera, for each analytic being configured, the administrator should be able to specify which users should receive notifications for that event.</p>	
14	APIs	<p>1. System should provide well defined APIs for integration with 3rd party systems.</p> <p>2. System should support both pull and push APIs.</p> <p>3. Pull APIs should be available for:</p> <ol style="list-style-type: none"> List of locations List of cameras Live view of a camera Listing of camera recordings for specific times 	

		e. Event details based on specific camera and specific times	
		4. System should provide Push API for analytics events.	
		5. It should be possible to define the end point where the analytics events should be pushed to.	
15	Relay integration	<p>1. System should provide an option to integrate with Relay devices in order to operate magnetic door locks, boom barriers, hooters etc. in response to analytic events generated in the system.</p> <p>2. While configuring any video analytic setting, system should provide an option to specify to which relay device the event should be sent to; for instance, releasing of magnetic door lock in response to Facial recognition event, sounding of a hooter in response to a zone intrusion event etc.</p> <p>3. It should be possible to add any number of relays in the system and assign one relay to one analytic.</p>	
16	IoT Sensor Integration	<p>1. System should provide an option integrate with IoT sensors such as PIR sensor, glass break sensor, water level sensor, door ajar sensor etc.</p> <p>2. System should enable associating a camera with each sensor.</p> <p>3. System should relay any event triggered by IoT sensor to the command center in real time along with snapshot and live view of the associated camera for visual verification enabling to take prompt action and tracking the response.</p>	
17	Command Center	<p>1. Any and all events triggered from analytics configuration on any of the connected cameras, should automatically popup on the command center page.</p> <p>2. Along with an image of the event that was triggered, live view of that camera also should automatically be displayed on the page.</p> <p>3. It should be possible for the person to write down action taken for that event in the system itself.</p> <p>4. User should also be able to escalate that event for further review.</p> <p>5. The selected reviewer should receive an email notification and he should be able to review that event, note down his comments or action taken and close the event.</p>	
		6. Complete information regarding all the events triggered along with the action taken for it and who has taken the action etc should be exportable to a csv file.	

2. Item 2 - Desktop Specifications for observers

Sl No	Description	Technical Specification
01	Form Factor	Micro Tower Model
02	Processor	Intel Core i7
03	Memory	8 GB Ram
04	HDD	1 TB SATA
05	Audio	Integrated High Definition (HD) Audio
06	Ethernet	Integrated Gigabit Ethernet Connection
07	Ports	Front Ports: - 2*USB, microphone (3.5mm), headphone (3.5mm) Rear Ports: - 4*USB 3.0, 2*USB 2.0, 1*Serial port, 1*Ethernet (RJ-45), 1*VGA, 1* DisplayPort, 1*HDMI, Line-in (3.5mm), line-out (3.5mm), microphone
08	Slots	2*PCI / PCIe Slots or higher
09	Power Supply	Minimum 180 watts
10	Operating System	Genuine Windows 11 Pro 64 Bit
11	Graphics Card	2GB graphics card
12	Display	43" Full HD LED Television with Connectivity: HDMI, USB, Ethernet and WiFi Audio: 16 watts or higher Support both wall mount and desk mount

3. Item 3 – Video Wall Specifications

S. No	Item	Specification	Compliance (Yes/No)
1	Videowall Controller	1. Support Master Audio Output	
		2. Front Buttons for Switching Inputs	
		3. Support Automatic Temperature Detecting of Capture Cards	
		4. Support 4K Resolution Background Image on whole Videowall Screen	
		5. Support Customized Output Resolution under Different Groups for Multi Videowall Setup	
		6. Support Pixel to Pixel Mapping for Active LED Screens	
		7. Support Control by WEB Browser	
		8. Support Central Control Device, such as Creston and AMX for Audio and Video Switching	

		9. 1U dimension 4 IN and 9 OUT HDMI Configuration	
2	Video Wall Management Software	1. Any Source on Any Display in Any size with easy Drag and Drop	
		2. Source Overlapping	
		3. PIP and POP	
		4. Preset Management	
		5. Grid Management within 1 Display (2x2, 3x3, 4x4, 5x5, 6x6)	
		6. -Auto Source Detection for Input Sources	
		7. Ticker Scrolling Text with Transparent and reverse effects	
		8. Unlimited Layouts	
		9. Supports Control by Web Browser	
		10. Audio Control with Mute/Unmute options in Software GUI for HDMI Sources	
		11. Display Brightness Correction	
		12. Scheduling of Preset as per time interval	
3	Video wall Panel	1. Screen Size: 55"	
		2. Panel Technology: IPS	
		3. Aspect Ratio: 16: 9	
		4. Native Resolution: 1,920 x 1,080 (FHD)	
		5. Refresh Rate: 60Hz	
		6. Bezel Size: 3.5mm Screen to Screen	
		7. Brightness: 500	
		8. Contrast Ratio: 1,200:1	
		9. Dynamic CR: 500,000: 1	
		10. Color gamut: NTSC 72%	
		11. Viewing Angle (H x V): 178x178	
		12. Color Depth: 10bit, 1.07Billion colors	
		13. Response Time: 8 ms (G to G)	
		14. Surface Treatment (Haze): 3%	
		15. Life Time (Typ.): 60,000Hrs	
		16. Life Time (Min.): 50,000Hrs	
		17. Operation Hours (Hours / Days): 24/7	
		18. Portrait / Landscape: Yes / Yes	
		19. Handle: Yes	
		20. VESA™ Standard Mount interface: 600X400	
		21. Operation Temperature: 0 °C to 40 °C	
		22. Operation Humidity: 10 % to 80 %	
		23. Power Supply: AC 100-240V~, 50/60Hz	
		24. Power Type: Built-In Power	
		25. Operation Temperature: 0 °C to 40 °C	

		26. Input: HDMI 2 (HDCP 2.2), DP (HDCP 2.2), DVI-D (HDCP 1.4), Audio In, RS-232C In, RJ45 (LAN), IR In, USB 2.0 Type A	
		27. Output: DP Out (Input: HDMI / DVI / DP), Audio Out, RS-232C Out	
		28. IP Rating: IP5X tested	

Evaluation of Technical Bids

Technical Bids of all those bidders whose solutions are fully compliant with the above specifications only will be considered for technical evaluation. Those selected bids will be evaluated as per the following scoring scheme and parameters. Bid needs to score a total score of 70 points or more to qualify for the next round of evaluation.

S. No	Criteria	Description	Points
1	Experience	Proposed monitoring solution should have been used in providing AI based examination surveillance for 5 years	Max 5 Points 1 year - 2 3 Years - 3 5 years and above – 5
2	VMS & Analytics Software	<ol style="list-style-type: none"> The proposed software for centralized monitoring and the AI based video analytics should be from the same OEM. Certificate to be submitted on OEM letter head, signed by authorized signatory of OEM University should be able to setup required analytic on any camera of any exam centre from central location with a single login through a browser. It should be possible to schedule same or different analytic on multiple cameras at different times of the day using the same analytics license. 	Max 30 Points <ol style="list-style-type: none"> Both are from same OEM – 10 points, If OEMs are different no points will be awarded. If the said feature is provided by the software, 10 points will be awarded, if not provided no points will be awarded. If the said feature is provided by the software, 10 points will be awarded, if not provided no points will be awarded.
3	Recording and Storage	<ol style="list-style-type: none"> University should be able to schedule recordings for any camera from central 	Max 10 Points <ol style="list-style-type: none"> If the said feature is provided

		<p>location seamlessly using a single login using a browser.</p> <p>2. The software should provide ability to store locally as well as on the three major global cloud providers – google, azure and amazon; and search for any recording and play back irrespective of where it is stored.</p>	<p>by the software, 5 points will be awarded, if not provided no points will be awarded.</p> <p>2.If the said feature is provided by the software, 5 points will be awarded, if not provided no points will be awarded.</p>
4	Integration	<p>1. System should provide relay integration to sound hooter alarm or switch on flood lights etc in response to event triggered through video analysis</p> <p>2. System should accept events triggered from IoT sensors such as glass break sensor etc and notify in the command center along with live view of the camera associated with the sensor.</p>	<p>Max 20 Points</p> <p>1.If the said feature is provided by the software, 10 points will be awarded, if not provided no points will be awarded.</p> <p>2.If the said feature is provided by the software, 10 points will be awarded, if not provided no points will be awarded.</p>
5	Monitoring Setup	<p>1. It should be possible to group cameras from multiple districts for ease of viewing on the browser along with audio control for each camera in the group.</p> <p>2. Any analytic event alert should popup on the monitors of the central command control center and allow to monitor that camera view without any manual intervention.</p> <p>3. Should be possible to escalate events for review by superior officer and also track down action taken for each event.</p>	<p>Max 15 Points</p> <p>1.If the said feature is provided by the software, 5 points will be awarded, if not provided no points will be awarded.</p> <p>2.If the said feature is provided by the software, 5 points will be awarded, if not provided no points will be awarded.</p> <p>3.If the said feature is provided by the software, 5 points will be awarded, if not provided no points will be awarded.</p>
6	Implementation Methodology	Technical Presentation and Demonstration. Bidder should	Max 20 Points

		be able to show in a single platform, ip and analog cameras of different brands from different locations during the presentation / demo and show all the requested features.	To be evaluated during presentation/demonstration by the technical panel
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Dr. NTR UNIVERSITY OF HEALTH SCIENCES, VIJAYAWADA
e- Tender Document “Providing Central web streaming setup at the Command Control room at Dr. NTR UHS, Vijayawada”

Sl. No	Item	UoM	Qty	Unit Price Incl. tax	Total Price Incl. Tax	Applicable Tax %	AMC Price as % of Total Price (Incl. taxes) from Year 2 onwards
One Time Costs							
1.1	Desktop Systems with display as per specifications mentioned in section 4.2	Nos	14				
1.2	2x3 video wall with 55" display as per specifications mentioned in section 4.3	Nos	1				
Annual Recurring Costs							
2.1	Vigilance System Software and Analytics Licenses (Baseline) for 1 year as per specifications mentioned in section 4.1	No	1,750				N/A
2.2	Additional Vigilance System Software and Analytics Licenses for 1 year as per specifications	No	750				N/A
2.3	Onsite Technical Support resources per year	No	2				N/A
2.4	Observer resource persons per year	No	10				N/A

Technical bids will be evaluated first. The financial bids of the successful technical bidders only will be evaluated for finalizing the bidders.

I/We read and accept the above terms and conditions.

Place:

Date:

Signature of the Tenderer

With seal.