

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

As Amended after Pre-Bid Meeting dated 09/06/2018

Properly sealed quotations are invited for and on behalf of CNLU, by the Registrar, Chanakya National Law University, Nyaya Nagar, Mithapur, Patna - 800001 from Original Manufacturers or their authorised dealers / retailers of reputed brand of IP based CCTV surveillance system.

Name of the work: Supply, installation & Commissioning of **IP based HD CCTV Surveillance Systems** inside of Girls Hostel Building, inside of Boys Hostel Building & earmarked locations inside CNLU Campus.

| | | |
|---|---|--|
| Cost of Document | : | Rs. 10000/- in form of DD. DD should be in favour of Registrar, Chanakya National Law University, Nyaya Nagar, Mithapur, Patna – 800001 |
| Work Completion Time | : | 60 days from the date of work order. Subject to reviewed after 60 days |
| EMD | : | Rs. 1,20,000/- in form of DD. DD should be in favour of Registrar, Chanakya National Law University, Nyaya Nagar, Mithapur, Patna – 800001 |
| Date & Time of receipt of bid | : | 27/06/2018 up to 04:00 pm |
| Date & Time of Pre Bid meeting | : | 09/06/2018 at 02:30 pm |
| Date & Time of Presentation | : | during Pre-Bid meeting |
| Date & Time of opening of Technical Bid: | : | 27/06/2018 at 04:30 pm |
| Date & Time of opening of Financial bid : | : | 29/06/2018 at 04:30 pm |
| Place of all meeting | : | Registrar's Chamber |

Scope of work

- A. The scope of work shall include the design, supply, installation, commissioning, and testing of UL, FCC and RoHS certified IP based CCTV Bullet Camera in totality including related wiring, conduit laying and civil jobs (such as wall cutting, plastering, painting and complete finishing for wiring).

Eligibility

Eligibility terms for intending quotationer are as follows:

1. The quotationer should be registered under Indian Companies Act 1956 / Partnership Act or proprietorship firm. Supporting documents should be annexed along with the technical quotation.
2. The quotationer should be an India based National level Organization of repute with minimum of 10 years of operation in the field of CCTV Surveillance / experience in the supply & installation of Enterprise Level Server, Network attached Storage & their Networking and shall have valid registration, valid GST registration certificate and Permanent Account Number (PAN) issued by respective authorities. Copies of certificates should be submitted along with technical quotation.
3. The quotationer should have a proven track record of design, supply, installation and commissioning of CCTV Surveillance Systems for reputed Institutes of Higher Learning / Indian Universities / Central or State

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

Government Organizations / PSUs / Professional bodies, with at least one CCTV Surveillance projects of Rs. 20 Lakhs during any one of the last five financial years (from 2013-14 to 2017-18). Copy of work orders / agreements along with completion / satisfactory performance certificates be annexed along with technical quotation.

4. The quotationer should not be currently blacklisted by any Central Ministry / State Govt. Departments / Public Sector Units / Universities nor should have any litigation enquiry pending and / or initiated by any Department or Court of Law with regard to the works executed by it during the last five financial years. **The quotationer shall furnish an undertaking duly attested by notary on a non-judicial stamp paper of value Rs. 100/- (Rupees Hundred only) as per Annexure II.**
5. Those quotationers who are either blacklisted or debarred or against whom FIR has been lodged or whose contract has been rescinded by any Government /PSU or who have failed to execute the awarded work in past three years will not be allowed to participate in this bid process.
6. Quotationer should be OEM or its authorized partner / dealer / retailer. OEM`s authorisation certificate (For IP Camera & VMS) to the effect should be submitted in envelop of technical quotation. Photocopy or scanned copy of OEM`s authorisation is not acceptable.
7. Joint Ventures are not allowed to participate in this NIQ.
8. Quoted product model should be UL, FCC and RoHS certified and OEM should be non China origin.

Terms & Conditions

1. Quotations received after due date & time shall be summarily rejected.
2. Manner of submission of the Quotations: Sealed Quotations Technical & Financial in separate sealed covers should be either dropped in the Quotation Box marked “NIQ No. -11/2018-19 Group A dated 05/06/2018 for Supply, installation & Commissioning of IP based HD CCTV Surveillance Systems” or be sent by Post at the address given above so as to reach by the due date and time. Incomplete quotations are liable for rejection. No responsibility will be taken for postal delay or non-delivery/ non-receipt of Quotation documents.
3. Quotations should be forwarded by Quotationers under their original memo / letter pad as per Format mentioned in Annexure III and IV.
4. Quotationers are advised to be present in the meeting of Pre Bid, Technical Bid and Financial Bid.
5. Quotationers are advised to study all technical and commercial aspects, instructions, terms and specifications carefully in the Quotation document. Failure to furnish all information required in the Quotation Document or submission of a quotation not substantially responsive to the Quotation document in every respect will be at the quotationer`s risk and may result in the rejection of the quotation. Quotationer may ask for any query / clarification through written request / e-mail (registrarcnlu@gmail.com) up to the date of pre bid meeting.

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

6. The Interested quotationer should give a detailed presentation on how their technology is best suited for the University on Pre-bid meeting. However, the committee shall have sole discretion to call for discussion/presentation.
7. This Quotation document is not transferable.
8. All documents should be signed by proprietor or an authorised signatory of firm. Original Certificate of authorisation should also be attached. Interlineations, corrections, erasures and/or over-writings shall be valid only if initialed by the person or persons signing the quotation.
9. Quotationers should attach copy of Firm registration, copy of certificate of GST registration, PAN Card in the name of firm or proprietor, Financial Statements, Brochure of make & model, UL, FCC and ROHS certificate of quoted make & model duly stamped & ink signed, as per check list annexed vide Annexure-I, Declaration vide Annexure-II and Technical Quotation vide Annexure -III in Technical Quotation envelope.
10. Notwithstanding anything to the contrary in this document, the Chanakya National Law University is not bound to accept the lowest quotation and reserves the right to accept or reject any quotation, to reject quotations for some or all items and to cancel the quotationing process at any time prior to the award of contract, without assigning any reason whatsoever.
11. The work has to be completed within the period mentioned against works. It will be reckoned from the date of the issue of work order. If the work is not completed within the completion period liquidated damages @0.5% of agreement value per week of delay will be levied (subject to maximum of 10%). If the liquidated damages reach the level of 10% the contract is liable to be rescinded. In future, the quotationer will not be eligible to participate in quotations.
12. This notice is being issued with no financial commitment. The Buyer reserves the right to amend or vary any part thereof at any stage. Buyer also reserves the right to relax terms & conditions of the quotation in the interest of work and withdraw the Quotation, should it become necessary at any stage.
13. Service Label Agreement(SLA): During the warranty period SLA will be applicable as below:

| <u>SL No</u> | <u>Services</u> | <u>Time Limit</u> |
|--------------|--|---|
| 1 | Service support should be available on all the working days of the Govt. | Sundays and General Holidays are excluded |
| 2 | Time limit for servicing during warranty period. | Within 72hrs (excluded Holidays). |
| 3 | Time limit for replacing the systems during warranty period. | 15 days from the date of call attended or as mutually agreed by Vendor and CNLU authorities (depends upon the situation). |
| 4 | If the vendor fails to service/replace the unit. | An amount equivalent to 5% the quoted/accepted price of the equipment will be charged to the vendor. |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

14. Buyer reserves the right to withdraw / cancel / amend the quotation at any stage without assigning any reason whatsoever.
15. OEM of CCTV should have their service centre at Patna or in Kolkatta. They should provide after sales & service for a minimum period of two years after expiry of warranty period. The name and address of service centre should be indicated in the offer.
16. Quantities of items are tentative. It may increase or decrease as per requirements.
17. Warranty and onsite support on CAMERA, WORKSTATION, NVR, RACK, LED MONITOR AND SWITCHES will be for three years.
18. Clarification regarding contents of the quotations: During evaluation and comparison of quotations, the Buyer may, at its discretion, ask the quotationer for clarification of his quotation. The request for clarification will be given in writing and no change in prices or substance of the quotation will be sought, offered or permitted. No post-quotation clarification on the initiative of the quotationer will be entertained.
19. Quotationer with product certifications related to the quotations should be annexed with technical quotations. Alteration in the make & models will not be permitted.
20. Financial Quotations of only those firms will be opened whose Technical Quotations are found responsive.
21. Rejection of Quotations: Canvassing by the Quotationer in any form, unsolicited letter and post-Quotation correction may invoke summary rejection. Conditional Quotations will be rejected.
22. Any Suggestions/Clarifications may be put forth in the pre quotation meeting.
23. The quotationer should adhere with all seriousness to the time schedule provided by the Chanakya National Law University, Patna.
24. The quotationer shall be liable to indemnify the Chanakya National Law University, Patna in all respects and meet and pay off the litigation expenses and all the liabilities including damages, sums etc. arising out of and as a consequence of the negligence, deficiencies, mistakes, lapses, delays etc. in the execution of the various jobs and the services provided.
25. **Quotation Evaluation Process:**
 - A. **Evaluation of Technical Quotation:**
 - Detailed technical evaluation shall be carried out in relation with the conditions in the quotation document to determine the substantial responsiveness of each quotation. For this clause, the substantially responsive quotation is one that conforms to all the eligibility and terms and condition of the quotation without any material deviation.
 - The evaluation committee may call the responsive quotationer who comply all Eligibility of the quotation for discussion to facilitate and assess their understanding of the scope of work and its execution.

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

B. It is mandatory for the bidder to qualify all the Technical qualifications (including eligibility criteria) to be responsive and for being considered for opening of their Financial Quotation and evaluation thereof.

26. All payments are subject to statutory deductions as and when applicable.

27. 90% payment will be made after successful installation, commissioning and product verification. Rest 10% will be released after one month from the date of first payment.

28. Dispute if any, will be subject to Patna jurisdiction only.

29. The work order placed is liable to be cancelled at any time if any document submitted by agency is found fake and misleading.

30. Amendment of Quotation Document.

30.1 At any time prior to the last date for receipt of quotations, the client may for any reason, whether at its own initiative or in response to a clarification requested by a prospective Quotationer, modify the Quotation Document by an amendment.

30.2 The amendment will be notified through official website of Chanakya National Law University for all the prospective Quotationers.

30.3 In order to afford prospective quotationer reasonable time in which to take the amendment into account in preparing their quotations, the Client may, at its discretion, extend the last date for the receipt of the Quotations.

31. The selected quotationer will have to enter into agreement within 15 days from date of issue of work order. Performance security of Rs. 1,20,000/- (One Lakhs Twenty Thousands) in shape of demand draft in favour of Registrar, Chanakya National Law University, Patna issued by any scheduled / nationalized bank and be submitted at the time of agreement. If agreement is not signed within stipulated period earnest money may be forfeited. 2% TDS and 2% GST will be deducted from running on account bills. Total 10% performance security deposit including 5% initial security deposit will be 10% of agreement value. Performance security will be refundable after 60 days from completion of warranty period.

32. Quantity of all items in Annexure-III is tentative. Payment of this item will be made on actual quantity installed.

33. The software OEM should have a proven track record of at least one live surveillance system of any large government establishment/PSU/Airports/City Surveillance (within India) with minimum of 400 IP cameras. Such project should have all components like VMS and VCA etc. End customer/user certificate/site acceptance report to this effect should be submitted along with copy of work order/ satisfactory certificate from relevant system integrator & copy of invoice from software OEM as a proof of commercial transaction.

Registrar
CNLU, Patna

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

Annexure-I

CHECK LIST (SHOULD BE ATTACHED WITH TECHNICAL QUOTATION DOCUMENT)

| <u>Sr. No.</u> | <u>Description</u> | <u>Remarks</u> |
|----------------|--|----------------|
| 1. | Passport size Photograph of the Quotationer / authorized Signatory holding power of attorney | |
| 2. | Name of the Firm | |
| 3. | Address with contact number, FAX, E-mail of the Firm | |
| 4. | PAN No Attach copy of PAN card | |
| 5. | Address of local office for after sales service in Patna | |
| 6. | GST details Attach copy of Registration Certificate | |
| 7. | Firm`s Bank Account Details with Bank Name, Address and IFSC / RTGS codes | |
| 8. | Copy of Document of Company Registration /Incorporation. | |
| 9. | Copy of Document for UL, FCC and RoHS Certifications as per para 9 of Terms & Conditions. CSA/UL, FCC and RoHS Certificates in case of Server. | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | |
|-----|---|---|
| | Attach copy of documents duly attested | |
| 10. | Copy of documents as per para 3 of Eligibility. Attach copy of documents duly attested | |
| 11. | Annexure II as per para 4 of Eligibility. | |
| 12. | OEM authorisation certificate as per para 6 of Eligibility. | |
| 13. | DD of Cost of Document Details | Amount : Rs. 10,000/- (Ten Thousand Only) DD No. with Date: Name and address of the issuing Bank |
| 14. | DD of Earnest Money Deposit Details | Amount : Rs. 1,20,000/- (One Lakhs Twenty Thousand Only) DD No. with Date: Name and address of the issuing Bank |

I / We hereby declare that information furnished above is true and correct and the documents annexed are genuine.
Signature of the Quotationer / Authorized Signatory

Name & Signature of the Quotaioner with Designation

Seal of the Quotationer

Place

Date

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

Annexure-II

Declaration

I / we declare

that my / our company namely..... has not been black listed by any Government / Non-Government Organisation nor should have any litigation enquiry pending and / or initiated by any of these Department or Court of Law with regards to the works executed by our company since incorporation. No FIR has been lodged against us.

The documents annexed along-with the quotation are genuine. If they are found fake or forged the Purchase Order / Agreement may be cancelled and FIR may be inflicted against us by the University

Signature of the Quotationer / Authorized Signatory

Name of the Quotationer

Seal of the Quotationer

Place

Date

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

Annexure III

Technical Quotation

| <u>Sr. NO</u> | <u>ITEMS</u> | <u>TENTATIVE SPECIFICATIONS</u> | <u>Tentative Quantity</u> | <u>QUOTED MAKE & MODEL</u> | <u>COMPLIANCE WITH SPECIFICATION (PUT YES OR NO)</u> | <u>REMARKS</u> |
|---------------|--|---|---------------------------|--------------------------------|--|----------------|
| 1 | Server for IP based CCTV Surveillance systems | MAKE HP, IBM, DELL, FUJITSU or equivalent brand | 2 | | | |
| | <u>FEATURE</u> | <u>TECHNICAL SPECIFICATION</u> | | | | |
| | Processor | Intel® Xeon® Silver 4110 | | | | |
| | Processor Core available | 8 | | | | |
| | Cache | Minimum 8 MB Smart Cache or better | | | | |
| | Processor speed | 2.1 Ghz or better | | | | |
| | Number of Processor | One | | | | |
| | Form Factor | 2U or better | | | | |
| | Memory Type | DDR4 2666 MHz or better, support maximum up to 96 Gb or better | | | | |
| | Memory | 16 Gb (1x16 Gb) RDIMM / DIMM, | | | | |
| | Operating System & Remote Collaboration Software | Compatible with LINUX/Windows Server + 5years license of Internet Security with Anti Virus included + system performance tuning and monitoring software on Windows. The tuning software should have modules for resource monitoring over a long period of time, and should be capable of showing CPU utilisation (GPU, Graphics memory and Codec activity) for both Graphics and GPU Computer cards. A complete Offline Diagnostics and Asset Discovery software suite should be supplied along with the server. *University already has Windows Server License. | | | | |
| | Surveillance HDD | 4x 8 TB, Support up to 128 TB or better | | | | |
| | DVD Drive | One | | | | |
| | RAID | 5 | | | | |
| | Graphic Card | Nvidia Quadro Graphic Card with 2 GB or better | | | | |
| | Form Factor Chasis | Tower or Rack | | | | |
| | Power Supply | AC Power Input Module Common Slot | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | |
|----------|-------------------------------|--|----------|--|--|
| | Type | | | | |
| | Network Port | 1*10M/100M/1000M self-adaptive RJ45 port | | | |
| | USB Port& Slots | 1 x USB 3.0, 1 x USB 2.0, 1 PCIe Gen3 x16; 1 PCIe Gen3 x4 (x16 connector); 1 PCIe Gen3 x1 (x4 connector); 1 PCIe Gen3 x1 | | | |
| | Upgrade | Support U disk/ M.2 Drives, Network Upgrading | | | |
| | Working Temperature | 0° C~+45° C or better | | | |
| | Keyboard, Mouse, Audio | USB Key Board, Optical mouse, High Definition Audio Card with External Speaker | | | |
| | Certifications | CSA/UL, FCC and RoHS | | | |
| | Warranty | Three years | | | |
| | | | | | |
| 2 | LED Monitor | | 2 | | |
| | FEATURE | TECHNICAL SPECIFICATION | | | |
| | Screen Size | 43" (108cm) | | | |
| | Panel Technology | Minimum IPS | | | |
| | Aspect Ratio | Minimum 16:9 | | | |
| | Native Resolution | Minimum 1920 x 1080 (Full HD) Brightness 350cd/m2 | | | |
| | Contrast Ratio | Minimum 1,100: 1 (Native) | | | |
| | Dynamic CR | Minimum 500,000: 1 | | | |
| | Operating Hours | Minimum 18 Hours / Day or better | | | |
| | Viewing Angle (H x V) | Minimum 178° x 178° | | | |
| | Orientation | Portrait and Landscape | | | |
| | Surface Treatment | Hard coating (3H), Anti-glare treatment (Haze 1%) or better | | | |
| | Input (Rear) Digital | Minimum HDMI (1), DVI-D(1), Support HDCP | | | |
| | Analogue | Minimum RGB (1) | | | |
| | Audio | Yes (1) | | | |
| | External Control | RS232C (1), IR receiver (1) | | | |
| | USB | Yes (2, USB2.0) | | | |
| | Wi-Fi | Dongle Compatible | | | |
| | Wired LAN | 10/100 or 10/100/1000 | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|----------|---|---|----------------------------|--|--|--|
| | Digital Audio | Yes (1) | | | | |
| | External Control | RS 232C (1) | | | | |
| | Additional | Temperature Sensor, Auto Config/Phase, SNMP Support, Input Label, Contents Scheduling, DPM Select, Holiday Schedule, Smart Energy Saving, File Play with USB, USB Cloning, Built-in Speakers (10W x 2), PM Mode, Tile Mode, Lock Mode | | | | |
| | Operation Temperature | Minimum 0 °C to 40 °C or better | | | | |
| | Operation Humidity | Minimum 10 % to 80 % or better | | | | |
| | Power Supply | Minimum 100-240V~, 50/60Hz | | | | |
| | DPM | Minimum 0.7W Typical / Smart Energy Saving on, 60W/45W | | | | |
| | Power Off | Minimum 0.5W | | | | |
| | Power Type : | Built-In-Power | | | | |
| | Certifications | UL, FCC and RoHS | | | | |
| | Warranty | Three Years onsite | | | | |
| | | | | | | |
| 3 | HD IR BULLET CAMERA WITH VARIFOCA LENS | Make=BOSCH/PELCO/HONEYWELL eQuip MODELS/AXIS/TYCO AMERICAN DYNAMICS/ /SONY Streaming=Triple | 51+16+7+5+4 =83 | | | |
| | <u>FEATURE</u> | <u>TECHNICAL SPECIFICATION</u> | | | | |
| | Type | 1080P Bullet Camera | | | | |
| | Sensor | 1/3" or better CMOS sensor | | | | |
| | Lens | Varifocal 2.8 to 12 mm or better with Auto Zoom / Auto Focus | | | | |
| | Pixel | 2.0 Megapixel | | | | |
| | FPS | 1920 x 1080@30 FPS video frame rate or better | | | | |
| | Backlight Compensation | BLC | | | | |
| | Wide Dynamic Range | Min 100 dB or better | | | | |
| | Built-in IR illuminator | 50 m viewing distance Supporting dual streaming level or better | | | | |
| | White Balance | Auto Mode / Manual or better | | | | |
| | Horizontal field of view | 35° - 90° or better | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|----------|--|--|----------|--|--|--|
| | Vertical | 18° - 53° or better | | | | |
| | Sensitivity | F1.4 or better | | | | |
| | Colour | 0.24 lx or better | | | | |
| | Mono | 0.05lx or better | | | | |
| | Automatic Electronic Shutter | 1/3 to 1/10000 or better | | | | |
| | Audio output | 16Vms, 30mw, support earphone or power amplifier or G.711 A-Law Bi Directional Audio | | | | |
| | Network Port | 10-100M Ethernet RJ45 port support | | | | |
| | Network Protocol | TCP/IP/HTTP/RTSP/FTP/DDNS/UPnP etc | | | | |
| | Power | POE & 12V DC | | | | |
| | Camera Body, Housing & Protection | Weather proof IP67 or better, Camera Should have Impact – IK10 Protection on complete body (not only in housing) | | | | |
| | ONVIF | ONVIF Compliance | | | | |
| | Working Temperature | -30 °C to +50 °C for Continues Operation or better | | | | |
| | Warranty | Three years Warranty | | | | |
| | Product Certification | UL, FCC, and ROHS | | | | |
| | Protocol | TCP/IP/HTTP/RTSP/FTP/DDNS/UPnP etc | | | | |
| | Signal to noise | > 50 dB Intelligent Dynamic Noise Reduction | | | | |
| | SD Slot | Min 128 GB SD for network failure | | | | |
| | Video Codec | H.264 (MP)/H.265+/H.265/H.264+/ M- JPEG | | | | |
| | | | | | | |
| 4 | VMS (Video Management Software) | | 1 | | | |
| | <u>FEATURE</u> | <u>TECHNICAL SPECIFICATION& CONDITIONS</u> | | | | |
| | Type | Intelligent , Is of Third Party or of same OEM of Camera | | | | |
| | Platform | Can be run & installable in any of the Operating System such as Microsoft Windows/LINUX etc. VMS shall be open to any IP and Analog cameras integration. It should support Windows, Linux, and Mac OS on Client machine, independent of what operating system is there in the servers. | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | Support all the ONVIF IP Camera of major brand such as BOSCH, SONY, HONEYWELL eQuip, PELCO, AXIS, TYCO AMERICAN DYNAMICS etc. VMS should have ONVIF profile S and Profile G compliance. In such respect VMS should support Storage system at least five (5) major vendors. | | | | |
| | | VMS shall be open to any video wall system integration. | | | | |
| | | VMS should be compatible for transferring the due to increase in number of CCTV Cameras from one server to numbers of servers as required. | | | | |
| | | Single VMS will support up to 1024 cameras | | | | |
| | | Up-gradation of VMS should be free of cost during the operational period. | | | | |
| | | VCA (Video Content Analytic) Software should be run in same server where VMS installed. At least three analytic (Camera Disconnection, Media Server Disconnection, Storage Disconnection) should be free with VCA. VMS software and Video Analytics should be preferably from the same OEM. | | | | |
| | | The VMS shall allow Pre and post event recording should be available. | | | | |
| | | At least three analytic (motion in the scene, alarm inputs, network failure, and/or camera tampering) should be free with camera/VMS. | | | | |
| | | VMS shall comply with any conventional storage technologies (IDE/ SCSI/ RAID/ SAN/ CAS/ NAS or any two) to accommodate future potential expansion. | | | | |
| | | VMS shall be able to use server installed HDD as well as NAS/SAN in the same system for recording purpose. | | | | |
| | | It shall be possible to create Recording Schedules on the fly, and assign any schedule to any camera, any group of camera or to all the cameras any time. The recording shall be controlled on hourly basis. It shall be possible to manage recording on per camera basis, each with different video settings (format, frame rate and resolution). | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|--|--|--|--|--|--|--|
| | | VMS shall allow users to mark any specific segment of the video as Critical video segment, so that those particular segments of video do not get deleted on the default scheme (FIFO, Retention period, etc.). | | | | |
| | | Archive retention period shall be configurable on per camera basis. The system shall allow both retention based as well as fifo based deletion policy. | | | | |
| | | Remote access, Live viewing and Archive search etc. VMS should support GPU rendering for minimize specification of hardware | | | | |
| | | ISO:9001:2015 Certification / CMMI-Level 5 Certification | | | | |
| | Fail Over Support | <ul style="list-style-type: none"> The system shall support automatic failover for recording servers. The allocation of Cameras to recording servers shall be done automatically by the VMS in a load balanced manner. Once configured, the Video Management System shall not require reconfiguration of any kind when any server passes through a power Off-On cycle. The system shall provide seamless access to recordings on the failover server for all clients through the same client views once the services are fully started. <p>Health monitoring module shall provide intuitive alarm management through the use tools including:-</p> <ul style="list-style-type: none"> Detailed listing of all active or incoming alarms with available filters for time period, alarm source, operator and alarm state. Ability to preview, view live or playback recorded images. Automatically close an alarm based on a corresponding event. Generate audit trail reports for system. | | | | |
| | VMS Client Viewer (Operator) features | <ul style="list-style-type: none"> VMS shall provide feature-rich administration client for system | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|--|--------------------------|---|--|--|--|--|
| | | <p>configuration and day-to-day administration of the system</p> <ul style="list-style-type: none"> • The Client Viewer shall provide a Graphical User Interface (GUI) for the convenient access of live and recorded video as well as camera properties and display quality • The Client Viewer shall support real time simultaneously view of 1, 2x2, 3x3, 4x4, 1+5, 1+7, 1+11 and 8x8 / 6X8 multi-screens video display and a simple click shall allow enlarging any of the multi-screen displays into a full screen display. On clicking again on the enlarged display, multi-screen display shall reappear. • It shall be possible to drag and drop cameras from the camera directory to the display screen. • The Client Viewer shall offer the capability of browsing recordings from cameras on the same panel where other cameras are displayed live. There shall be provision to replay multiple such cameras from various timestamps, independent to one another. • Digital zooming shall be possible both on live view as well as on Replay view on Cameras. | | | | |
| | <p>Management</p> | <ul style="list-style-type: none"> • VMS shall allow managing initial client logon, system configurations, logging, remote administration of recording servers, devices, security, rules, alerts and logging. • VMS shall support at least 5 levels of users with various privileges to access the system functionality. Each category of users shall have selectable rights to perform various operations like Camera add/delete, Change camera settings, Configure storage, User management, etc. • The System health status like Server failure, Camera disconnection, Storage | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|---|--|---|--------------|--|--|--|
| | | <p>full, etc., shall always be displayed at the top panel in Client UI.</p> <ul style="list-style-type: none"> VMS shall maintain a continuous log of server status messages, Camera connectivity, Storage status, Recording ON/OFF, User activity logs , etc., which shall be accessed from the Workstations using different filters. VMS shall be able to detect IP devices automatically. | | | | |
| | Camera Connectivity | <ul style="list-style-type: none"> Each operator shall be able to monitor one or several clusters of camera Parameter settings shall be adjusted based on camera manufacturer contextual menu Following typical camera parameters shall be manageable: <ul style="list-style-type: none"> Brightness, compression, contrast, include date and time, resolution, rotation Frame per second, bit rate control mode, maximum bit rate, bit rate control priority, target bit rate, Camera’s Name, Description, Hardware name and Part number, Hardware configurable events / System Events | | | | |
| 5 | 24-PORT 10/100/1000 L2 Managed POE SWITCH | | 6+2=8 | | | |
| | <u>FEATURE</u> | <u>TECHNICAL SPECIFICATION</u> | | | | |
| | Number of Ports | L2 Managed Switch with 24 port, 10/100/1000 Mbps Base-T PoE+ ports and additional 4 1G Base-X ports accommodate SM/MM FO Module, All port PoE+ capable, 2 SFP | | | | |
| | PoE Standard | IEEE 802.3af and IEEE 802.3at with PoE budget of 370W or more. | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | |
|---|--|--|--|--|--|
| Full/Half Duplex | Full/half duplex for 10/100 / 1000 Mbps speeds, Full duplex for Gigabit speed. | | | | |
| Working Temperature | 0° C ~ +45° C or better | | | | |
| Switching Capacity | 56 Gbps or better | | | | |
| Forwarding rate (based on 64 byte packets) | 40 Mbps or better | | | | |
| CPU Memory | 128 Mb RAM or better | | | | |
| Layer 2 Features | Should support STP, RSTP, MSTP, IGMP v1/v2/v3 snooping, loop protection, STP root guard, Voice VLAN, MLD snooping (MLDv1 and v2), IEEE 802.3ac, IEEE 802.1v, 16k MAC Table or more, PVST+ compatibility mode, VLAN Mirroring (RSPAN), Support IEEE 802.1Q (4000 VLAN IDs), Should support GARP VLAN Registration Protocol / GVRP, VLAN classification by protocol and port, IEEE 802.3ac VLAN tagging. | | | | |
| Resiliency | Should support IEEE 802.17 / MRP for Ring Protection and Loop Protection / equivalent for sub 50ms ring protection in following scenario: single, dual fibre cuts in ring, Control Plane Prioritization (CPP), Loop Detection and Loop protection. | | | | |
| Security | Should support ACL, DHCP(relay and client), IP Source guard, DAI, Private VLAN, AAA, Authentication (MAC, Web and IEEE 802.3x), BPDU Protection, sflow or equivalent, FIPS or equivalent, Port-based learn limits (intrusion detection) or equivalent, SSLv2 and SSLv3, TACACS+, LAG, IP precedence and DiffServ marking based on layer 2, 3 and 4 headers | | | | |
| QOS | Policy-based QoS based classifying traffic based on MAC, Port , VLAN , Protocol, Tail drop for queue congestion control, Strict priority/ weighted round robin. | | | | |
| Management | CLI, GUI, USB interface for taking backup of software release files configurations, DDM – Optical digital diagnostic monitoring as per SFF – 8472 or equivalent, UDLD or equivalent ,Time Domain Reflectometry/ equivalent, DHCPv6, DNSv6, Telnetv6 and SSHv6, RMON 4 groups, SNMPv3, LLDP-MED, IEEE 802.3az, IPv4 and IPv6 support | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|---|---|---|-------------------|--|--|--|
| | | Should support single IP management of min 24 switches for ease of management. | | | | |
| | | The switch shall have pro-active intelligence to create an ICMP polling for service reach ability based on IP address and configure pro-active action upon loss or re-establishment of the service reach ability | | | | |
| | | Should support functionality to continuously monitor the received optical power of fibre ports and send SNMP trap when received optical power crosses predefined threshold level to avoid physical intrusion on fibre links | | | | |
| | | The proposed switch should support Centralised provisioning through SDN technology for simplified management and maximum up time with better MTTR (Mean time to restore) | | | | |
| | | Event-based triggers allow user-defined scripts to be executed upon selected system events based on Time, Date, Day and Event based | | | | |
| | | Should have pre-installed SFP module of 1Gb in each switch | | | | |
| | Warranty | Three Years onsite | | | | |
| | | For ease of integration, all switches and SFP Module should be of same OEM. | | | | |
| | Certifications | UL, FCC and RoHS | | | | |
| | | | | | | |
| 6 | UTP CAT-6 CABLE IN METER OF MAKE MOLEX or equivalent | | 6280 metre | | | |
| | FEATURE | TECHNICAL SPECIFICATION | | | | |
| | Standards | ANSI/TIA/EIA-568-C.2-1. Cat6 cable should be tested up to 600MHz. | | | | |
| | Type | 4 pair, 23 AWG, UTP. | | | | |
| | Certifications | UL Listed, ETL Certified. | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|-----------|---|---|-------------------|--|--|--|
| | Construction | 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted. | | | | |
| | Conductor | Solid bare Copper | | | | |
| | Conductor Diameter | 0.56±0.005mm (23 AWG) | | | | |
| | Insulation | High Density Polyethylene | | | | |
| | Jacket | PVC | | | | |
| | | | | | | |
| 7 | NETWORK RACK | Make=VALRACK/PRESIDENT/RITTAL or equivalent 9U Wall mount Network Enclosure with 5 Socket PDU, Cooling Fan, Cable Manager, Front Glass door and H/w Screw with Three Years Warranty | 6 | | | |
| | | | | | | |
| 8 | RJ 45 Connector | Standard Make | 200 | | | |
| | | | | | | |
| 9 | CONDUIT PIPE 1 INCH | ISI Mark, Medium Duty | 3000 metre | | | |
| | | | | | | |
| 10 | PVC (Poly Vinyl Chloride) Wire Reinforced Flexible Conduits. | | 300 metre | | | |
| | | | | | | |
| 12 | Electrical Wire | 2 core, 1.5 square mm, Copper ISI Mark and of Reputed Brand such as ANCHOR / HAVELLS | 400 metre | | | |
| | | | | | | |
| 13 | 15 Ampere Socket | ISI Mark and of Reputed Make such as ANCHOR / HAVELLS | 5 | | | |
| | | | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|----|--|--|------------------|--|--|--|
| 16 | On-Line Smart-UPS 6KVA with all accessories of make APC/EMERSON | Tower, 4800 Watts / 6000 VA, Input 180-280V, Output 230V, RoHS Certified, Warranty – Three years | 1 nos. | | | |
| | | | | | | |
| 17 | SMF Battery of make EXIDE or equivalent | 42 AH, Warranty Two Years or more | 16 pieces | | | |
| | | | | | | |
| 18 | Battery Stand for 16 nos battery | Iron make with wheel of standard quality, Painted with Black Color, Wheel attached. | 1 nos. | | | |
| | | | | | | |
| 19 | 4 Gauge battery Cable Assemblies | Interlink Cable , Standard for 6KVA Online UPS with Nut-Bolt and all accessories required for Battery Connectivity | 16 pieces | | | |

Name & Signature of the Quotaioner with Designation

Seal of the Quotationer

Place

Date

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

Annexure IV

Financial Quotation

| <u>SL.NO</u> | <u>ITEMS</u> | <u>Tentative Quantity</u> | <u>QUOTED MAKE & MODEL</u> | <u>Unit rate exclusive of all taxes</u> | <u>Applicable taxes</u> | <u>Total Amount inclusive of all taxes</u> |
|--------------|---|---------------------------|--------------------------------|---|-------------------------|--|
| 1. | Server | 2 | | | | |
| 2. | LED Monitor | 2 | | | | |
| 3. | VMS | 1 | | | | |
| 4. | VMS License per IP Camera | 83 | | | | |
| 5. | HD IR BULLET CAMERA WITH VARIFOCAAL LENS | 83 | | | | |
| 6. | 24-PORT 10/100/1000 L2 Managed PoE SWITCH | 8 | | | | |
| 7. | UTP CAT-6 CABLE IN METER OF MAKE MOLEX | 6280 metre | | | | |
| 8. | NETWORK RACK | 6 | | | | |
| 9. | RJ 45 Connector | 210 | | | | |
| 10. | CONDUIT PIPE 1 INCH | 3000 metre | | | | |
| 11. | PVC (Poly Vinyl Chloride) Wire Reinforced Flexible Conduits. | 300metre | | | | |
| 12. | Electrical Wire 4mm | 400metre | | | | |
| 13. | 15 Ampere Socket | 5 | | | | |
| 14. | Conduit Pipe Laying and Fitting (including Cat6 & Electrical cable insertion & laying, including all accessories required for laying) | 3000 metre | | | | |
| 15. | IP Camera installation and testing | 83 | | | | |

CHANAKYA NATIONAL LAW UNIVERSITY, PATNA

Nyaya Nagar, Mithapur, Patna -1, Ph. No. – 0612-2352300, Website: <http://cnlu.ac.in>

NIQ No. – 11/2018-19 Group A

Dated: 05/06/2018

| | | | | | | |
|-----|--|-------------|--|--|--|--|
| 16. | Server installation and testing (including operating system and all type of software installation) | 1 | | | | |
| 17. | Wall cutting, plastering, painting and complete finishing for wiring. | 2400 metre | | | | |
| 18. | On-Line Smart-UPS 6KVA with all accessories | 1 nos. | | | | |
| 19. | SMF Battery | 16 pieces | | | | |
| 20. | Battery Stand for 16 nos battery | 1 nos. | | | | |
| 21. | 4 Gauge battery Cable Assemblies | 16 pieces | | | | |
| 22. | Project handling, Complete Installation & Commissioning charges | One Project | | | | |

Name & Signature of the Quotaioner with Designation

Seal of the Quotationer

Place

Date