

**West Bengal Police Housing
&
Infrastructure Development Corporation Limited**

(A Govt. of West Bengal Undertaking)

(CIN:U70109WB1993SGC058358)(GSTIN:19AAACW6099C2Z1)
**Araksha Bhawan, 3rd Floor, Block – DJ, Sector – II, Salt Lake
City, Kolkata – 700091.**

Ph. & FAX. 033 – 23586188, E-mail: tender@wbphidcl.com

NOTICE INVITING e-QUOTATION

Memo No. ENGG/ESTM/7156/2018/4368

Dated: 20 .11.2019

Notice Inviting Quotation No - WBPHIDCL/ACE/ NIQ-33(e)/ 2019-20(1st call)

Assistant Chief Engineer, W.B.P.H. & I.D. Corpn. Ltd. Invites Quotations on behalf of the Chairman & Managing Director, West Bengal Police Housing & Infrastructure Development Corporation Limited for the following work. Collection and Submission of Quotation is to be made online through the website <http://wbtenders.gov.in> only.

Name of the Work:

Supply, installation & maintenance of CCTV Surveillance system in the campus of CIF & SIG, West Bengal at 307, Garia Main Road, Kolkata.

In the event of e-filling, intending bidder may download the Quotation documents from the website: <http://wbtenders.gov.in> directly with the help of Digital Signature Certificate & necessary earnest money should be remitted through online process as per Finance Department Order No. 3975-F(Y) dated 28.07.2016.

Details of submission procedure are given in Section II.

For last date & time of submission of bids online refer date and time schedule attached with this NIQ.

The intending bidder must read the terms and conditions of the NIQ carefully. They should particularly go through the eligibility criteria required and satisfy themselves of the requirements for eligibility. They should submit their bid only if they consider themselves eligible and they are in possession of all the documents required.

All communication should be address on the e-mail address of the Corporation.

All information posted on the website consisting of NIQ and related documents, Prescribed Form of 'West Bengal Police Housing & Infrastructure Development Corporation Limited', Corrigendum etc if any, shall form part of the Quotation document.

QUOTATION NOTICE

Assistant Chief Engineer, West Bengal Police Housing Corporation Ltd. on behalf of Chairman & Managing Director, WBPIDCL proposes to award the contract to selected bidder for implementing the SITC work of **of CCTV Camera security surveillance system at CIF, SIF, Garia** through e-procurement portal of Government of West Bengal (www.wbtenders.gov.in). Prospective bidder willing to participate in this Quotation shall necessarily register themselves with above mentioned e-procurement portal.

Cost of Quotation Document	NIL
Earnest Money Deposit	Rs. 50000/- Only
Completion Period	120 days from the date of awarding of Work
Validity of Bid	120 days from the last date of submission of bid
Queries, if any, regarding the Quotation is to be made to:	Assistant Chief Engineer, West Bengal Police Housing & infrastructure Development Corporation Limited

Date & Time schedule: -

Sl. No	Particulars	Date & Time	
1.	Date of Publishing of NIQ online through the website https://wbtenders.gov.in	20 .11.2019 at 18:55 Hrs	
2.	Date & Time for downloading of Quotation Documents from the website https://wbtenders.gov.in	Start	20. 11.2019 at 18:55 Hrs
		End	09 .12 .2019 at 16:00 Hrs
3.	Date & Time of Submission of Quotation through the website https://wbtenders.gov.in	Start	25 .11.2019 at 18:00 Hrs
		End	09 .12 .2019 at 16:00 Hrs
4.	Date, Time & Place of opening of Technical Bid through the website https://wbtenders.gov.in	11.12.2019 at 16:00 Hrs Office of the West Bengal Police Housing And Infrastructure Development Corporation Limited Araksha Bhawan, 3rd Floor, Block – DJ, Sector – II, Salt Lake City, Kolkata – 700091.	
5.	Date of Uploading the List of Bidders participated in the Quotation through the website https://wbtenders.gov.in	To be informed later	
6.	Pre-bid Meeting	Queries may be sent through e-mail (tender@wbphidcl.com)	
7.	Date of Uploading the Final List of Technically Qualified Bidders after Technical Bid Evaluation through the website https://wbtenders.gov.in	To be informed later	
8.	Date, Time & Place of opening of Financial Bid through the website https://wbtenders.gov.in	To be informed later	
9.	Date of Uploading of List of Bidders along with their Rate Offered through the website https://wbtenders.gov.in	To be informed later	

SD/-

Assistant Chief Engineer,
West Bengal Police Housing &
Infrastructure Development Corporation Ltd.

Memo No. ENGG/ESTM/7156/2018/4368

Dated: 20.11.2019

Copy forwarded for favour of kind information & wide circulation to the:-

1. The Chairman & M.D. W.B.P.H.I.D. Corpn. Ltd. Araksha Bhawan, Salt Lake City, Kolkata-700027
2. The Inspector General of Police(Organization), West Bengal, Bhawani Bhawan, Alipore, Kolkata 700027
3. The Chief Engineer, WBPHIDCL, Araksha Bhawan, Salt Lake City, Kolkata-700027.
4. The F.A. & C.A.O. WBPHIDCL, Araksha Bhawan, Salt Lake City, Kolkata-700027.
5. The Executive Engineer (Electrical), WBPHIDCL, Araksha Bhawan, Salt Lake City, Kolkata-700027.
6. The Assistant Engineer (System), WBPHIDCL, Araksha Bhawan, Salt Lake City, Kolkata-700027.

SD/-

Assistant Chief Engineer,
West Bengal Police Housing &
Infrastructure Development Corporation Ltd.

Section-I

Synopsis of the Project

1. Project Overview

Supply, installation & maintenance of CCTV Surveillance system in the campus of CIF & SIG, West Bengal at 307, Garia Main Road, Kolkata on a turnkey basis.

The essence of the project is to:

1. Detect an event and to identify the elements/ objects /persons involved in the event within the field of vision (even in low light condition at night).
2. Storage and retrieval of such recordings with facilities for immediate or future analysis (30 days).

The system architecture is defined in such a manner that the entire System (Hardware & Software) shall be open to any cameras integration. As a result existing resources in CIF Campus may be reused optimally and augmented in the new system. The systems architecture must be scalable enough to add new cameras in future without changing the software and with incremental cost, and can be consolidated in a Central Monitoring Station in future. The systems architecture should be scalable enough to extend it and should have enough customization capability as per the user requirements.

Specification of each component in the system has been detailed in the quotation document. It should either be free or bundled with VMS offer along with the Anti-virus support. Extra charges for operating system or Anti-virus will be not entertained. VMS should support all standard browsers – Internet Explorer, Firefox, Safari, Chrome, etc. as updated in client machine. The system will not be dependent on any proprietary camera model. Any ONVIF compliant camera from any vendor should work. Also non-ONVIF compliant cameras can be integrated with the system with the available camera SDK.

The system will have the facility to add Network attached storage to record video data. The system will be capable of augmenting with unlimited storage capacity in future without requiring changing the systems architecture or the software. This can be accomplished at ease with simple software reconfiguration without losing any data recorded till the time the reconfiguration is done. System should be capable of future expansion of the system including additional control room.

Considering the importance of a CCTV system in CIF Campus, it is proposed that an IP based High Definition intelligent video surveillance solution be installed covering all the important locations. To ensure coverage in the specified outdoor locations IP Varifocal Bullet Camera with built in IR Illuminator is proposed. The proposed camera must have High performance and long service life Infrared LED. High Definition cameras will ensure better clarity of picture and ensure identification of the person/object. IR Illumination will ensure visibility at night also. All cameras must be mounted with military grade vandal proof housing.

Cable connections for the work should be well out of reach from other common people.

The proposed network architecture supports either wired or wireless communication backbone. Hence it is not limited to wire communication only and wireless network can be used for each of installation, maintenance and to avoid disconnection due to man-made or natural calamities as much as possible.

2. Scope of Work

The scope of work includes **Supply, installation & maintenance of CCTV Surveillance system in the campus of CIF & SIG, West Bengal at 307, Garia Main Road, Kolkata** along with necessary components (Servers, Storage, Workstations, Networking system, etc.) to make a complete functional IP based intelligent CCTV system on turnkey basis and maintenance of the system for 5 years.

Purpose of the system is as follows:

- i) The system will be used for surveillance of selected intersections and locations suggested by the officials of the concerned Authority.
- ii) Smart investigation for post facto analysis of incidents.

Feed from all cameras to be transmitted to respective Control Room for viewing and for online storage. The System is architected to augment a Central-control room if required.

The system shall provide for online storage of video images for minimum 30 days. The system should be able to use server installed HDD as well as NAS/SAN in the same system for recording purposes, scalable in future as and when required.

The onsite support/maintenance of the whole system shall be for a period of 3 years from the date of commissioning and successful handing over (Acceptance) with associated works as described and set forth in the quotation document.

The system shall adhere to open standards and all the software shall run in standard Operating system including Open source Linux OS, providing maximum flexibility and low cost of ownership, scalable to meet future surveillance and intelligent traffic monitoring needs, and ease of use.

The bid should be inclusive of all accessories, brackets, and camera poles, various types of cables, conduits, ducts etc. and maintenance for the entire period of 3 years.

Specification laid down in the quotation document is only indicative and not exhaustive.

Bidders may quote for additional items to implement the system completely if needed.

Scope shall not be restricted to the items listed in the schedule or requirement and specifications only. All the items, component and equipment that are needed to make the complete system functional and secure should be considered during the bid.

The network (wired/wireless or hybrid) to be provided shall be secure and the bidder must ensure that sufficient bandwidth is available (from local network provider/ISP or any other wired/wireless source available, local police authorities may assist the contractor in negotiation with local ISP/Cable operators) at all times to transmit video from all cameras to the respective Control Room/s. Necessary software/hardware components need to be provided by the bidder to ensure security of data throughout the lifetime of the system.

The bidder shall guarantee system uptime as per the SLA. Failure to do so shall result in penalty, which is laid down in Service Level Agreement. The software to record and generate periodic reports/Reports-on-demand of the system health is to be delivered by the bidder along with the system.

The system offered by the bidder shall have no single point of failure.

Any technical deviation and proposal from bidder's side should be clearly mentioned.

The following activities comprise the total scope of work:

- Configuration and Integration of equipment.

- Installation and Configuration of IP based Surveillance Solution.
- Supply and installation of Video Management System.
- Seamless integration of the surveillance system with Video Management System.
- Provide vandal resistant housing for the IP Cameras and other equipment to be housed in every identified place given in the location list later in this document.
- Setting up Control room with display screens at locations for real time monitoring of Video feed, and smart navigation events from the archived video for investigation.
- Video recording shall be retained for 30 days for future reference and use.
- Training on overall system.
- Acceptance Test.
- Sign-Off with Documentation.
- Maintenance and support of IP Video Surveillance System & Other Components highlighted above to meet purpose of the system for 3 years.

Warranty Period & Post Warranty Maintenance Period

Bidder shall ensure supply/replacement of spare parts for equipments for 5 years post completion (counting from the date of handover) including maintenance of software, replacement/ augmentation if any required to keep the system operational. Onsite support and maintenance is must to keep the system downtime minimized.

Section II

General Guidelines for the Bidder

1. Quotation Process

Open Quotation for the work as mentioned in Section –I of this document. Bids shall be submitted online (www.wbtenders.gov.in). No conditional bid will be accepted.

2. Pre-Bid Meeting

Prebid queries may be sent to tender@wbphidcl.com.

3. Earnest Money Deposit (EMD)

Earnest money deposit should be remitted through online process as per Finance Department Order No. 3975-F(Y) dated 28.07.2016. This amount will be forfeited if, having been selected by the WBPHIDCL authority for the job, the Bidder refuses to accept work order or having accepted the work order, fails to carry out his obligations mentioned therein. Bank Guarantee in lieu of Earnest Money Deposit will not be accepted. No interest will be payable on the Earnest Money Deposit. The Earnest Money Deposit will be refunded to the unsuccessful bidder. The Earnest money paid by the successful bidder will be converted to security deposit.

The EMD will be forfeited if a bidder withdraws his offer before finalization of the Quotationer. The EMD of the successful bidder shall also be forfeited if the bidder fails to sign the prescribed agreement within the specified period.

4. Initial Security Deposit

The successful bidder to whom the contract is awarded shall deposit as Initial Security Deposit in form of bank guarantee from any scheduled bank or demand draft drawn in favour of WBPHIDCL, payable at Kolkata of a sum to make up 10% of the value of accepted Quotation after the appropriation of the Earnest Money Deposited by him. The successful bidder shall submit Initial Security Deposit within 15 days after receiving the letter of acceptance of his Quotation through online process. No interest shall be paid on this Security Deposit. The Security Deposit, either in whole or in part thereof, shall be forfeited in the event of the bidder's failure to observe any terms of this Contract / or non-compliance with the conditions of the contract. This initial security deposit will be released after 3 years counting from the date of handing over of the completed system, subject to the condition that this amount is not forfeited under any clause of this Quotation.

5. Submission of Bid

The Quotation will be in two parts.

- i) Technical Proposal &
- ii) Financial Proposal.

The Technical Proposal (TP) should be complete in all respects and contain all information asked for in this document. It should not contain any price information. However TP should confirm that all required rates have been quoted in Financial Proposal (FP), without showing the actual amounts in the Technical Proposal. It should clearly state the Make and Model of the products offered for which rates have been quoted by the Quotationer in the Financial Bid. Any hardware accessories, software or operating system supplied free along with the system or at a cost must be indicated separately and specifically. For a single item only one make and model is to be quoted so that Technical evaluation can be done on that basis.

It is mandatory to submit the technical specification details in the prescribed pro-forma duly filled in, along with the offer. In case of non-submission or partial submission of technical details, the **Technical Evaluation Committee (TEC)**, at its discretion, may not evaluate the proposal. The Technical Proposal must be submitted in an organized and structured manner. No brochures/leaflets etc. should be submitted in loose form.

The Financial Proposal (FP) should contain relevant price information and the rates should be quoted in Indian Rupees only. The FP should not contradict the TP in any manner.

The offer from the supplier should be for a specific model, for an item. The TEC reserves the right to reject any offer with multiple options.

General Submission Process: Quotations are to be submitted online through the website stated. All the documents uploaded by the Quotation Inviting Authority form an integral part of the contract. Bidder are required to upload all the Quotation documents along with the other documents, as asked for in the NIQ, through the above website within the stipulated date and time as given in the NIQ.

Quotations are to be submitted in two folders at a time for each work, one is Technical Proposal and the other is Financial Proposal. The Bidder shall carefully go through the NIQ and prepare the required documents and upload the scanned documents in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid. Bidder needs to fill up the quoted amount for the work in the financial form and upload the same in designated location of Financial Bid. The documents uploaded are virus scanned and digitally signed using the Digital Signature Certificate (DSC). Bidder should specially take note of all the addendum/corrigendum related to the NIQ and upload the latest documents as part of the NIQ.

The quoted rate will be inclusive of all taxes and duties/GST.

All the documents should be properly indexed.

- The financial proposal should contain the following document in one cover (folder).
 - o Bill of Quantities (BOQ): The bidder is to quote the rate for each component of the BOQ online through computer in the space marked for quoting rate in the BOQ. *(Only downloaded copies of the above documents are to be uploaded, virus scanned and digitally signed by the bidder)*

6. Bidder's Minimum Eligibility Criteria

1. The bidder should be a Company registered in India under the Companies Act 1956 or a partnership registered under the India Partnership Act 1932 or Limited Liability Partnership Firm registered under the Limited Liability Partnership Act 2008 with their registered office in India for the last five years.
2. The bidder should have a valid PAN and GSTIN.

3. An undertaking (self-certificate) on Non Judicial Stamp Paper that the bidder hasn't been blacklisted by a central / state Government institution and there has been no litigation with any government department on account of similar services. It must be submitted as per Form 6.
4. The bidder's average annual turnover in India should be minimum Rs. 50 Lakhs or more in each of the last three financial years viz. **2017-18, 2018-19 and 2019-20** and should have earned profit during the last three financial years.
5. Works executed in the last 3 years from the date of publication of this Quotation - The Bidder should have executed at least one similar job valued at minimum Rs. 25 Lakhs in a single order in any of the organization listed vide para 8 .(ii). (Certified documents to be submitted).
6. Minimum Nos. of surveillance system designed, procured, deployed and maintenance - The Vendor should have designed procured, deployed and presently maintaining at least 1 fully IP based surveillance systems for any Govt. organization listed vide para 8.(ii)

(Certified documents to be produced with reference contact numbers-details should be filled in Form 5).

7. Bidder should be working for the last five financial years in CCTV based surveillance system business (Credentials (ie. Purchase/work order and completion certificates) should be presented).
8. The bidder must have its own office in West Bengal and should have Service Centers functioning at Kolkata. (List of service centers with address and Telephone / FAX nos. to be submitted).
9. Bidder should submit number of qualified engineers of the firm. There should be minimum five qualified engineers (Degree/Diploma holders) in West Bengal engaged with the firm (not contractual employee).
10. Bidder should submit PF and ESI registration.
11. OEM Certification - The bidders should be authorized by the OEMs (Original equipment manufacturers) of important items (like cameras, Video Management System, UPS, Network devices, Servers and Storage devices) to quote in the Bid.
12. Successful bidder has to submit a declaration that he is not a PF and ESI defaulter before issuance of Work Order.

7. Documents to be submitted

- i) NIQ and Addenda/Corrigenda (if published) will be submitted with the TP.
- ii) Power of Attorney should be in the form of Non-judicial stamp-paper certified by the Notary Public to establish the Authorized Signatory from bidder's side.
- iii) All Forms as mentioned in the Section – IV of this document.
- iv) Technical Write-up comprising of "Project Approach and Methodology" covering the sub-topics as mentioned in Section –I Clause 2 under Project Modules and Objectives, and Timelines.
- v) Certificate of Incorporation, Copies of Articles of Association (in case of registered firms), Bye laws and certificate of registration (in case of registered co-operative societies), Partnership deed (in case of partnership firm) /summary for partnership should be submitted.
- vi) Copy of PAN, GST registration should be submitted.
- vii) Undertaking on Non-judicial stamp paper stating the Bidder is Not Blacklisted or Bankrupt.

- viii) Credential regarding engagement in CCTV based surveillance system business in India for the last five financial years (2013-14, 2014-15, 2015-16, 2016-17 and 2017-18).
- ix) Turnover certificate duly certified by registered CA for last three financial years (2015-16, 2016-17 and 2017-18). A copy of I-T return acknowledgment for last three financial years (2015-16, 2016-17 and 2017-18) should also be submitted.
- x) A copy of the valid ISO 9001:2008 certificate.
- xi) All the enclosed Datasheets for the equipment mentioned in Form Section.
- xii) Necessary OEMs Certificates.
- xiii) Documents regarding Net Worth.
- xiv) Other relevant documents as mentioned in the above Bidder's Minimum Eligibility Criteria and Technical Evaluation Score.

NOTE: - Consortium will not be allowed in this project.

8. Completion Certificate

- I. The phrase "Completion Certificate" for PMC should be interpreted as "certificate of satisfactory execution of job in respect as per terms and condition of the contract".
- II. Completion Certificate of works AS A PRIME AGENCY (NOT as a member of joint venture or sub contractor) under the authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies constituted under the statute of the Central / State Government, Scheduled Bank, Zilla Parishad and Local Bodies.

Such Completion Certificates are to be issued by an officer not below the rank of Executive Engineer / Divisional Engineer / District Engineer / Project Manager/Divisional Manager/ Competent Authority of the State / Central Government Departments / Organisations. Discretion regarding acceptance of such Certificate lies solely with the TEC.

9. Bid Evaluation Process

- a) The Bidder must fulfil the "Minimum Eligibility Criteria" mentioned above to qualify for evaluation of "Technical Eligibility Criteria".
- b) WBPHIDCL may reject a bid and disqualify the bidder from further evaluation process if the bidder fails to fulfil the "Minimum Eligibility Criteria". In absence of any one of the documents required under "Minimum Eligibility Criteria", the offer may be treated as non-responsive & in that case WBPHIDCL will have the right to decide accordingly.

- c) Upon fulfilling all the “Minimum Eligibility Criteria” mentioned above, the bidder is eligible for the next stage of evaluation, which is the evaluation of “Technical Eligibility Criteria”.

Table 2: - Technical Evaluation Score:

Sr. No.	Technical Evaluation Criteria	Maximum Score
1	Company Profile	15
(a)	Average annual turnover in each of the last 3 years (Turnover in INR Crores); more than 50lacs & Less than 1Cr: Marks=5 Between 1 Cr to 3Cr : Marks = 7 More than 3 Cr : Marks = 10	10
(b)	Net worth (Net worth in INR Crores) 50 Lakhs to 1 Cr : Marks = 3 More than 1 Cr & Upto 2 Cr : Marks = 4 More than 2 Cr: Marks = 5	5
2	Experience of Company	30
(a)	Experience of Bidder in executing CCTV Surveillance Project in a similar scope in India (Minimum Project value = Rs. 25 Lacks) - COMPLETED PROJECTS ONLY; 1Project: Marks=5 2 projects: Marks = 7 More than 2 projects: Marks = 10	10
(b)	Experience of Bidder in executing CCTV Surveillance Project in a similar scope in India (Minimum Camera Numbers = 20) - COMPLETED PROJECTS ONLY 2 projects of 20 cameras or 1 project of 40 cameras: Marks = 4 2 projects of 40 cameras or 1 project of 70 cameras : Marks = 7 More than 2 projects of 70 cameras or more than 1 project of 100 cameras : Marks = 10	10
(c)	Presently maintaining at least 1 fully IP based Surveillance (minimum 50 nos of camera) systems for any Govt. Organization/PSU. For 1 project : marks =5, 2 projects : marks=7, more than 2 projects : marks=10	10
	Technical Evaluation, Demonstration, Proof of Concept, Presentation, Discussion (Section – 3 , Table 1 (mandatory), Table -2 to the rest) This will evaluate the total system in terms of networking, network security, network load distribution, synchronization, data transmission and	

3	<p>compatibility between active and passive elements. The purpose of this presentation would be to enable the Corp. to evaluate the vended proposed system in terms of hardware, software and the system efficiency and the scalability.</p> <p>Note: Architectural diagram, System integration diagram (mentioning proposed make & model), and Network diagram should be clearly portrayed in the technical bid documents submitted by the bidders. All technical documents should be properly indexed.</p>	55
(a)	Proof of Concept / Prototype & Technical Demonstration & user acceptance Test	10
(b)	Hardware Proposed	30
(c)	System Architecture(with diagrams) and Software Proposed	15
	Total Marks	100

- d) Pursuant to scrutiny and decision of the Technical Evaluation Committee (TEC), the summary list of technically eligible Bidder will be uploaded in the web portals.
- e) Financial proposals of the Bidder declared technically eligible by the Technical Evaluation Committee will be opened electronically by the Quotation Inviting Authority from the web portal stated above on the prescribed date.
- f) After opening of the financial proposal, the preliminary summary result containing name of bidder and the rates quoted by them will be uploaded.
- g) The Quotation inviting Authority may ask any of the Quotationers to submit analysis to justify the rate quoted by that Bidder.
- h) Quotation Evaluation Committee may ask the bidder with highest final composite score to lower down the rate offered by them.
- i) After holding such negotiation, AOC would be uploaded in the web portal in favour of the selected agency.

NOTE: -

1. Technical Evaluation:

(i) Section -III consists number of tables, out of which all items of Table-1 and few items of rest of the tables are '*' marked, which must be complied by the bidder, and non-compliance of that may implies failing in technical evaluation of bid.

(ii) (In Section-III) each items (which are not '*' marked) each tables, carries '1' mark for compliance and '0' for non-compliance.

(iii) (In Section – III) Bidder must have to attain 80% for each table (on the items which are not '*' marked) to qualify technically for that Table. Failure in any one of the Tables may imply failing in the Technical Evaluation.

2. Financial Evaluation:

(i) Technically qualified bids will be allowed for financial evaluation. The bidder with lowest amount quoted will be called for negotiating the rates.

(ii) In case of a tie in the financial score the bidder with the higher Technical Score will be invited for negotiations and selection first. While evaluation, the Committee may summon the Bidder and seek clarification / or verification of original hard copy of any of the documents already uploaded.

10. Acceptance of Offer

- a) The bidder with the highest final composite score as stated above, and fulfils the "Minimum Eligibility Criteria" may be awarded the contract.
- b) WBPHIDCL will issue a Letter of Acceptance (LoA) to the successful Bidder.
- c) The successful Bidder will need to send an unconditional acceptance of the LoA within 7 working days from the issue of the LoA.
- d) If the successful Bidder is unable to send the acceptance within the stipulated time, then WBPHIDCL as per their discretion can cancel the LoA issued and issue a fresh LoA to the L2 Bidder. The EMD for the original successful Bidder will be forfeited in this case.
- e) The successful Bidder is required to sign the Agreement (Contract), within 15 working days from the date of issue of the LoA. Failure to do so may result in forfeiting the EMD.
- f) The selected bidder shall mobilize its team and start executing the project within 10 days of signing of the Agreement.

11. Quotation Accepting Authority

Assistant Chief Engineer, WBPHIDCL.

12. Penalty Clauses and Liquidated Damage

- a) Failure to execute the Agreement after issue of Letter of Acceptance: If the successful bidder fails to sign the Agreement in the format shared by WBPHIDCL within 15 working days of issue of Letter of Acceptance from WBPHIDCL without any valid ground, then the EMD will be forfeited, the bid will stand cancelled and WBPHIDCL will have the right to either approach the L2 bidder or issue fresh NIQ for the said work at the sole risk and cost of the successful bidder.
- b) Failure to initiate work within 10 days of signing the Agreement: If the successful bidder fails to initiate work within 10 days of signing the Agreement, the EMD will be forfeited, the bid will stand cancelled and WBPHIDCL will have the right to approach the L2 bidder or issue fresh NIQ for the said work at the sole risk and cost of the successful bidder.
- c) Any delay in completion of the work over the stipulated period will attract penalty of 1% of the contract value per day subject to maximum of 10% of the contract value. The Corporation would have the right to terminate the contract in case the overall penalty for the delay in execution and delivery of the payment equals to 10% of the total contract value.

The Corporation reserves its right to recover any penalty imposed on the bidder, on account of delay in delivery of the project or incomplete execution of the project, by any mode, which includes adjusting from any payment to be made by the Corporation to the bidder and/or the initial security deposit.

- d) Failure to produce the original hard copies of the documents (especially Completion Certificates and audited balance sheets), or any other documents on demand by the Quotation Evaluation Committee within a specified time frame or if any deviation is detected in the hard copies from

the uploaded soft copies or if there is any suppression, the Quotation Evaluation Committee will bring the matter to the notice of the Assistant Chief Engineer immediately and the bidder may be suspended from participating in the bid process, with the approval of the Chairman & Managing Director of the Corporation for a maximum period 3 (Three) years. In addition, his Earnest Money Deposit will stand forfeited.

13. Taxes & duties to be borne by the Bidders / Suppliers / Manufacturer

Income Tax, Construction Workers' Welfare Cess and similar other statutory levy / cess will have to be borne by the Bidders / Suppliers / Manufacturers and the rate should be quoted accordingly after consideration of all these charges. **The quoted rate will be inclusive of GST or any other taxes and duties.**

14. Site inspection before submission of Quotation

Before submitting any Quotation (preferably before the Pre-bid Meeting), the intending Quotationers must make themselves acquainted thoroughly with the local conditions prevailing at site by actual inspection of the site and taking into consideration all factors and difficulties likely to be involved in the execution of work in all respect including transportation of materials, communication facilities, climate conditions and availability of local labour etc. and no claim, whatsoever, will be entertained on these account afterwards.

15. Conditional and Incomplete Quotation

Conditional and incomplete Quotations are liable to be summarily rejected.

16. No Price Variations

The commercial offer shall be on a fixed price basis. No upward revision in the price will be considered.

17. Validity of Offer

The offer should be valid for period of 120 days the last date of submission of the bid.

18. Termination

- i. The failure on the part of the successful bidder to perform any of its obligations or comply with any of the terms of this NIQ shall constitute an Event of Default on the part of the successful bidder. The events of default as mentioned above may include, inter-alia, the following:
 - a. the successful bidder has failed to perform any instructions or directives issued by the WBPHIDCL which it deems proper and necessary to execute the scope of work under the NIQ, or
 - b. the successful bidder has failed to remedy a failure to perform its obligations in accordance with the specifications issued by WBPHIDCL, despite being served with a default notice which laid down the specific deviance on the part of the successful bidder to comply with any stipulations or standards as laid down by WBPHIDCL; or
 - c. the successful bidder has failed to conform with any of the specifications as set out in the NIQ or has failed to adhere to any amended direction, modification or clarification as issued by WBPHIDCL and which WBPHIDCL deems proper and necessary for the execution of the scope of work under this NIQ;
 - d. There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the successful bidder;
 - e. The successful bidder or its team has failed to comply with or is in breach or contravention of any applicable laws;
 - f. The successful bidder has failed to comply with any terms and conditions of this NIQ;
- ii. In the event of any default by the successful bidder as stated above, WBPHIDCL will issue a Notice to the bidder in writing setting out specific defaults / deviances / omissions. The successful bidder will need to remedy the default/ deviances / omissions committed within thirty (30) days of the issuance of the notice to the satisfaction of WBPHIDCL. In case, the successful bidder fails to remedy the default to the satisfaction of WBPHIDCL, WBPHIDCL will be entitled to terminate the Agreement in full or in part.
- iii. Upon termination of the Agreement, the WBPHIDCL also has the right to debar the Agency from participating in future works.

19. Force Majeure

Neither WBPHIDCL nor the bidder will be in breach of the agreement if any total or partial failure by it of its duties and obligations is occasioned by any act of God, fire, floods, terrorist attacks, riots, political strikes or disturbance, stoppage of work due to governmental order/alert. If such reasons continue to prevent performance of either party's duties or obligations for a period of more than five (5) working days, the parties shall consult together for the purpose of agreeing what action should be taken.

20. Dispute Resolution and Arbitration

Arbitration is not allowed.

21. PAYMENT TERMS

Payment plan shall be as laid down below. No payment shall accrue until the performance guarantee has been furnished and equipment / goods are supplied as per terms mentioned below. The Selected vendor shall be responsible to implement the project, maintain and provide service as and when required for a term of 3 (Three) years

post handover of the Project and on completion of Agreement period, the Bidder shall transfer the system to the Purchaser. During this period the bidder shall have full responsibility for the delivery of the services, including all maintenance, and management activities, (as per SLA) etc.

The selected bidder shall make a payment request after the end of each milestone period / quarter with the following supporting documents:

- I. Acceptance certificate issued by the engineer in charge of WBPHIDCL.
- II. SLA compliance report as prepared by the Corporation or by a Third Party Monitoring Agency appointed by the Corporation.
- III. Certificate from bidder mentioning that service/support shall be available till the expiry of contract period supported by the certificates from all OEMs. No change has been done in the earlier submitted original OEM authorization/support certificate. The on-site warranty and service support will stand as per the original OEM's certificate.

Payment milestone		Payment
Phase I	Supply of all the items and equipment at designated location and submission of receipt reports along with acceptance of equipment by WBPHIDCL Engineer in charge. (As per BOQ)	50% of bid value or 75% value of the supplied material whichever is less
Phase II	Installation of all materials after Final Acceptance Test of all Equipment's of the System.	20% of bid value
Phase III	Completion of training and its result on being accepted by End user. Hand Holding Support after successful installation of the system and subsequent Go live of the entire system and issue of final acceptance certificate by the WBPHIDCL Engineer in charge.	15% of bid value
Phase IV	Onsite Maintenance support within the warranty period (1 year) plus maintenance period of 2 years. a) After end of 1 st year of post warranty onsite comprehensive maintenance period.	5% of bid value
	b) After end of 2 nd year of post warranty onsite comprehensive maintenance period.	10% of bid value

The payment in phase IV should be so adjusted that the total payment will be equal to the value of actual work done as per the rates quoted in the BOQ. The payment of RA as well as final bill for any work will be made according to the availability of fund and no claim for delay in payment will be entertained.

22. ACCEPTANCE CERTIFICATE

All Acceptance Certificates shall be issued by WBPHIDCL.

23. Return of Earnest Money of the Unsuccessful Bidder(S)

The Earnest Money of the unsuccessful Bidder(s) will be refunded automatically through online process if not forfeited by this Corporation.

24. WITHDRAWAL OF BID

Bidders are not allowed to withdraw the bid submitted for this NIQ.

25. GUARANTEES

The Surveillance System including all components delivered at the sites should be brand new. The supplier should also guarantee that all the software / components supplied by the supplier is licensed and legally obtained.

26. AVAILABILITY OF SPARES

Spares for the product offered should be available for at least 06 years from the date of issue of completion certificate for the entire project.

27. WARRANTY

The offer must include comprehensive on-site warranty, maintenance & support for three years counting from the date of handover of the entire surveillance system.

28. MAINTENANCE STANDARD EXPECTED DURING WARRANTY PERIOD AND MAINTENANCE PERIOD

The supplier should ensure that the defects in the CCTV System reported are set right on the same day (within 24 hours). In case, the system or any equipment cannot be repaired within the stipulated period, the supplier should provide a replacement till the system/equipment is returned duly repaired.

- (i) The successful bidder shall undertake preventive maintenance of the system at all locations once in 3(Three) months (By 30th March, 30th June, 30th September and 30th December of each calendar year). Failure to comply with the above requirement will attract a penalty at the rate of 1% of the capital cost of the entire system for each location. The penalty shall be deducted from the security Deposit.
- (ii) The successful bidder shall repair / replace the faulty equipment and carry out the necessary integration within 24 hrs from reporting of such failure. Failure to comply with the above requirement will attract a penalty at the rate of 1% of the capital cost of the particular unit / item for delay of every 24 hours after the initial 24 hours. The penalty shall be deducted from the security deposit.

29. CONTROL ROOM SETUP

Suitable cabling, arrangement of Power connectivity, networking etc that is required to run the application should be arranged and provided by the bidder. Space for control room and Power supply (230V, 50Hz) will be provided by the authority at a single point in the Control Room.

30. SYSTEM AVAILABILITY & SERVICE LEVEL AGREEMENT (SLA)

Service Level Agreement (SLA) shall be the part of the contract between WBPHIDCL and the successful bidder.

The end user refers to Police directorates.

SLA defines the terms of the successful Bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section. The successful Bidder has to comply with Service Levels requirements to ensure adherence to project timelines, quality and availability of services.

The entire system (all IP based equipments) and their uptime and performance should be calculated/measured automatically (Network management system) with no human interference and has to be certified by the end user and has to ascertain all the SLAs mentioned below.

Note: Penalties shall not be levied on the successful Bidder in the following cases:

- There is a force majeure event affecting the SLA which is beyond the control of the successful Bidder.
- The non-compliance to the SLA has been due to reasons beyond the control of the Bidder.

Theft cases by default would not be considered as "beyond the control of bidder". However, certain cases, based on circumstances and certain locations, police may agree to quality as "beyond the control of bidder". Damages due to Road Accident / Mishap shall be considered as "beyond the control of bidder". However, Power shut down or deliberate damage to camera / Pole would not be considered as "beyond the control of bidder"

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the System Integrator to the end user for the duration of this contract.

Definitions

For the purpose of this Service Level Agreement, the definitions and terms are specified in the contract along with the following terms shall have the meanings set forth below :

- "Uptime" shall mean the time period for the specified services / components with the specified technical service standards are available to the user department. Uptime, in percentage, of any component (Non IT & IT) can be calculated as
$$\text{Uptime} = \{1 - [(\text{Downtime}) / (\text{Total Time} - \text{Maintenance Time})]\} * 100$$
- "Downtime" shall mean the time period for which the specified services / components with specified technical and service standards are not available to the user department and excludes downtime owing to Force Majeure & Reasons beyond control of the Successful bidder
- "Incident" refers to any event / abnormalities in the functioning of the services specified as part of scope of work of the systems Integrator that may lead to disruption in normal operations of the Surveillance System.
- "Helpdesk Support" shall mean the 24 x 7 x 365 centre which shall handle fault reporting Trouble Ticketing and related enquiries during the contract.

- “Resolution Time” shall mean the time taken (after the incident has been reported at the helpdesk) in resolving (diagnosing, troubleshooting and fixing) or escalating (to the second level or to respective Vendors, getting the confirmatory details about the same from the Vendor and conveying the same to the end user), the service related troubles during the first level escalation.

Measurement of SLA:

The SLA matrices provided specific performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on quarterly basis. The SLA compliance report shall be prepared by automated tools/software with no human interference and must be approved by the end user. The SLA also specifies the penalties for lower performance and breach conditions.

Payment to the successful bidder is linked to the compliance with the SLA matrices. The matrix specifies three levels of performance, namely,

- The agency will get 100% of the contracted value if the all baseline performance matrices are complied and the cumulative credit points are 100.
- The Agency will get lesser payment in case of the lower performance. (for e.g. if SLA point score is 80 then the Vendor will get 20% penalized on the quarterly payment.
- If the performance of the Agency in respect of any parameter false below the prescribed lower performance limit, debit points are imposed for the breach.

The credit (+) points earned during the quarter will be considered for computing penalty. The quarterly payment shall be made after deducting the penalty as mentioned above.

The aforementioned SLA parameters shall be measured per the individual SLA parameter requirements and measurement methods through appropriate SLA measurement tools to be provided by the Successful bidder and audited by the end user of its appointed consultant for accuracy and reliability. The system integrator would need to configure the SLA measurement tools such that all the parameters has defined under SLA matrix can be measured and appropriate reports be generated for monitoring the compliance.

The end user shall also have the right to conduct, either itself or through any other agency as it may deem fit an audit / revision of the SLA parameters. The SLA s defined shall be reviewed by the end user on an annual basis after consulting the SI, Project Management Consultants and other experts. All the changes would be made by the end user after consultation with the Successful bidder and might include some corrections to reduce undue relaxation in service levels or some corrections to avoid unrealistic imposition of penalty, which are noticed after project has gone live.

Total penalty to be levied on the successful bidder shall be capped at 10 % of the annual maintenance value. However, the Corporation would have right to invoke termination of the contract in case of the overall penalty equals 10% of the annual maintenance value, the Corporation would also have right to invoke termination of contract in case cumulative debit point (breach points) are above 30 in 2 consecutive quarters and in such cases of termination of contract, the Corporation may invoke the PBG and forfeit the same.

Planned Downtime

Any planned application / server downtime would not be included in the calculation of application / server availability. However, the Successful Bidder should take at least 10 days prior approval from the end user in writing for the planned outage which should not be for more than 30 minutes, would be in lean period (non-movement period, like post mid night) and limited to max. 4 outages in a year. In case of planned outages at Data Centre level, services of other Data Centre services to be used to service the clients, while there would be no planned outages for Cameras.

Pre Implementation SLA

Timely delivery of the Scope of Work.

Definition	Timely delivery of deliverables would comprise entire bill material and the application systems, and as per successful UAT of the same
Service Level Requirement	All the deliverables defined in the contract has to be submitted On – time on the date as mentioned in the contract with no delay.
Measurement of Service Level Parameter	To be measured in Number of weeks of delay from the timelines mentioned in the section "Project timelines".
Penalty for non- achievement Of SLA Requirement	Any delay in the delivery of the project deliverables would attract a penalty per week of 0.5% of the CAPEX of contract value per week for first 10 weeks and 0.75% per week for every subsequent week.

SLA Matrix for Post Implementation SLAs

Sr. No.	Performance Area	Baseline		Lower Performance		Breach	
		Metric	Points	Metric	Points	Metric	Points
1. Camera, Video Feed Uptime and Quality							
1.	Uptime per camera (live feed available irrespective of bandwidth or last mile issues, which are in control of SI	97%	15	>=92% to <97%	9	<92%	-15
2.	At Monitoring Station: Live camera feed available from selected cameras for viewing) at any given time.	97%	10	>=92% to <97%	4	<92%	-12
3.	At the Sub-control Room: Live camera feed available from various other viewing centres at any given time.	96%	4	>=92% to <96%	2	<92%	-3
4.	Quality of Video feeds (Bad feeds due to Video, Jitter, dim	97%	13	>=94% to 97%	5	<94%	-10
5.	Average Frame rate maintained for viewing	88%	10	80.01 to 88%	5	Less than 80 %	-10
6.	Average Frame rate maintained for recording	95%	5	90 to 95%	3	Less than 90%	-7
7.	Video stream Latency Latency refers to the average time required for transmission of video feed from one point to another.	=<40 ms	5	>40-50 ms	3	>50 ms	-7
2. Application Performance							
1.	Overall application (s) availability at Monitoring Station (MS)	99%	5	>=96.5% to <99%	2.0	<96%	-4
2.	Maximum time for User Login	< 2 sec.	1	2.01 – 4.0 secs	0.5	> 4 sec.	-1
3.	Maximum time for Surveillance Application (s) opening this includes any application deployed	<5 sec.	1	5.01 – 10.0 sec.	0.5	> 10 secs.	-1.5
	For the project at Command Center						

4	Menu Navigation, Window/Screen Opening, Screen Navigation(Average) at MS	<2 sec	1	2.01-5.0 secs	0.05	>5 secs	-1
5	Retrieval of video feeds at MS	<2 sec	2	2.01-6.0 secs	0.5	>6 secs	-2
6	Report Generation Response Time (Alerts/MIS/Logs etc.)	Simple query - < 5 secs Medium complexity query - <30 secs High Complexity query - <1 min	1	Simple complexity Query = 5.01-10 secs Medium complexity query =10.01-15 secs High Complexity query =<15.1 sec-1 min	0.05	Simple complexity Query = >10 secs Medium complexity query =>15 secs High Complexity query = >1 min	-1
7	Lag time (movement of keyboard/joystick and actual moving indication through video feed viewed)	<3 secs	1	3.01-5.0 secs	0.5	> 5secs	-1
8	Maximum time for successful camera settings modification (in online mode)	<5 secs	0.5	5.01-10.0 secs	0.25	>10 secs	-0.7
3. End-User Equipment Uptime							
1	Monitoring workstations at Command Center & Viewing Centers	99%	2	>=97% to <99%	1	<97%	-2
2	Video wall/Monitor/Screen	99%	2	>=97% to <99%	1	<97%	-2
3	LED Display screens	97%	1	>=90% to <95%	0.5	<90%	-1
4. Underlying IT Infrastructure Uptime/Availability at Data Center							
1	Production Service Uptime	99.9%	4	>=99.5% to <99.9%	2.5	<99.5%	-10
2	Storage System Uptime	99.9%	5	>=99.5% to <99.9%	2	<99.5%	-10
3	Physical Security	Fully Compliant	1	Lacunae shown in compliance procedures	0.5	For every Non-compliance instance	-2
4	CCTV surveillance of data centre area	99%	1	97%-99%	0.5	<97%	-1
5. Security /Patch Services for IT Infrastructure							
1	Firewall and any other security appliance Uptime	100%	1	97% to 99.99%	0.5	<97%	-4
2	Security rules update within 2 hours of approved change management request	0 violation of service parameters	0.5	1-4 violations	0.3	>4 violations	-0.5
3	Anti-virus, Anti-spyware, Anti-spam updates Within 24 hrs of request	0 violations of Service parameters	0.5	1-5 violations	0.25	>4 violence	-0.5
4	Critical Patches – within 48 hours of patch release.	0 violation of service	0.5	1-4 violations	0.25	>4 violations	-0.5

		parameters					
5	Non Critical Patches – within 15 days of patch release.	Upto 1 violations of service parameters	0.5	2-5 violations	0.25	>5 violations	-0.5
6. Technical Helpdesk, Trouble Ticketing, Issue Resolution							
1	Average speed of Answer	<=10 secs	1	10 to 14 secs	0.5	>14 sec	-1
2	Average Call Lost Rate	0.05	1	0.5-2%	0.5	>2%	-1
3	Resolution of Critical Issue (that impacts more than one production services & higher mgmt call)	60 minutes	2	60.01 to 120 min	1.5	>120 min	-2
4	Resolution of Medium Level Issue (that does not impact production services)	120 minutes	1.5	120.01 to 240 min	0.7	>240 min	-1
5	Resolution of low level issue (upgrade, shifting and preventive maintenance (of non-production items))	2 days	1	>2 to 3 days	0.4	>3 days	-1
	Total Score		100		50		-120

Security Breach SLA

Note – This SLA for Security Breach is applicable over and above the SLAs mentioned in above table.

Definition	Security of the video feeds and the overall system is quite important and successful bidder shall be required to ensure no compromise is done on the same. Security Breach types considered for this SLAs are – <ul style="list-style-type: none"> • Availability of Video feeds to any other user than those authorized by the Police Dept. and provided passwords. • Availability of any report / data to any other user than those authorized by the Police Dept. and provided passwords. • Successful hacking of any active component of the network by any standardized user. • Or any other privacy rule is broken as per Govt. of India guidelines.
Service Level Requirement	Security compliance of the system should be 100 %.
Measurement of Service Level parameter	Any reported security breach shall be logged into the SLA Management solution as a security breach.
Penalty for non-achievement of SLA Requirement	For every security breach reported and proved, there shall be a penalty of INR 20,000/-

Tentative locations of installations and number and type of locations are enclosed with the document. However, the number, type and locations may change before/after placing the final order & award of the Quotation to the successful bidder. Final value of the cameras and other accessories shall be calculated on the basis of unit price quoted by the bidder.

32. MAINTENANCE CONTRACT

The supplier is to maintain the Surveillance System including all Accessories/components and software supplied for at least three years after the handover of the system. Comprehensive on-site maintenance charges, for the post warranty period, must be included in the financial bid.

After the comprehensive warranty and maintenance period of 5 years, the supplier may opt to get engage into an Annual Maintenance Contract at the price/charges as may be mutually agreed upon by the Corporation and the supplier. If any of the peripherals, components etc., are not available or difficult to procure or if the procurement is likely to be delayed, the replacement shall be carried out with equipment of equivalent capacity or higher capacity at no additional charges to the end user during the currency of warranty period and subsequent maintenance period.

33. RETRIEVAL OF RECORDING ON CD/DVD

As per requirement of the police, if request is made by the competent authority (End user) to the vendor for retrieving recording for a particular time period and preparing a CD/DVD of the same, the vendor *should give required technical assistance to the concerned officer/staff of the directorate/department to retrieve and prepare such recording on CD/DVD. The CD/DVD would be provided by the Superintendent concerned for the purpose. The agency will provide this technical assistance up to the expiry of the maintenance period of the project.*

Section-III

Technical Specification

Table – 1(*) : Minimum Guiding Specification (Mandatory)

- i. Bidder quoted each device / item / service has to be minimally compliant to the minimum guiding specification, asked for each device / item / service under concern.
- ii. If any of the devices / items / services is not minimally compliant to the guiding specification with respect to a single parameter, the bidder will may be technically disqualified and its bid will not be considered for further processing.
- iii. Bidder quoted specification must be supported with hyperlinked and highlighted concerned section of the PDF (Portable Document Format) document, available from public domain / standards making body.
- iv. Tender/Technical Committee may ask for technical clarification from bidder(s) on some parameters with in some specified duration, but this is not a binding on the Tender /technical Committee. Technical Committee has authority to comment on the clarification of bidder(s) as unrelated / not satisfying / not compliant / satisfying. Only compliant bid or with bid with all satisfying clarification will be considered for further processing. All clarification must be supported with relevant and highlighted document, available from public domain / standards making body.
- v. Bidder may mention necessary items, services, in tables against the mentioned row with parameter "Other Necessary Items, services for Integration" as deemed suitable by the bidder for comprehensively complete the job and commission the system.
- vi. All supplies must be RoHS compliant.CE, FCC and UL certified. Non destructive firmware upgradation of every active component is necessary.
- vii. Integration: To have remote access to the system, **the system must be integrated / connected with the existing Ethernet based TCP /IP network** of respective police jurisdiction with the IP address provided by the user, and necessary cables, connectors and work(as per applicable EIA/TIA or ISO std for structured cabling) must be provided / rendered by the bidder.
- viii. As a part of technical bid, System Diagram of the systems should be submitted and it should include minimally the following :-
 1. Architectural Diagram with labels and annotation
 2. System Integration Diagram with make and model of each sample device / system (as quoted).
- ix. Site Readiness Form [8(D) (Section-IV)] should be filled in by the successful bidder jointly with end-user and end-user entrusted organisation which includes site survey, as applicable.
- x. Successful Proof of Concept / Miniature Sample Setup with all software functionalities and sample switching devices with all different types of sample edge devices (camera with accessories) , as quoted, should be carried out at WBPHIDCL identified location, date and duration, and it is mandatory for technical evaluation.

After installation, contracted bidder, must provide the following, for each site, as applicable

1. *Installation certificate duly signed by the end-user for the entire system with list of components, mentioning make, model, sl. no. etc. and stipulated warranty period.*
 2. *Training Completion Certificate, duly signed by the end-user.*
 3. *All 2 types of diagrams [as mentioned above at viii]*
 4. *System Configuration Document detailing parametric value set and configuration scripts / Commands of devices and systems (server, network devices, storage, cameras, displays, UPSes etc.)*
 5. *Network should be certified minimally for 15 years for all passive components by the OEM, for each site, and network test (success) report must also be submitted.*
 6. *Any change in configuration must be reflected in Supplementary Configuration Document, during warranty and AMC period, as applicable.*
7. *All access credentials(User Id, password etc) along with IP address, device name, location with respect to each device, systems etc should be submitted to the end user and acknowledgement of such received by end user should be submitted to the authority.*
- x***. *Submission of Manufactures Authorisation Certificate from the OEM mentioning the Quotation, stipulated warranty period, serviceability with components for the mentioned AMC period, against each devices and system (with make, model), as quoted by the bidder, is mandatory.*
- x***. *All the active components of the system should have backup and upload capabilities, and the firmware upgradation of the same should be non destructive in nature.*
- x***. *The video management software (or any other software) used in the system must be with analytics and assistive in nature with least human interference and should be Adherence/compliance to applicable application security aspects in light of www.owasp.org guideline (Ref: Annexure: 1. Web application security checklist. 2. Secure programming guideline (Ver-2.0)), egovstandards.gov.in policy & guideline, IndEA(India Enterprise Architecture framework) with refer to applicable reference modules(8 no.)*
- xiv. *The system should provide clear image/video (especially at night) to fulfil the objective of the project (ie, surveillance, post and pre facto analysis of the event).*
- xv. Bidder as well as OEM should ensure the prominent movement of objects/persons available within the FOV of the camera.**

Table-1: 8 Megapixel IR Dome Cameras with Varifocal Lens**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	Image Sensor	1/2.5" Progressive Scan CMOS or Better				
2*	Min. Illumination	Color: 0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR				
3*	Shutter Speed	1/3 s to 1/100000 s, Supports Slow Shutter				
4*	Image Enhancement	Back Light Compensation (BLC), 3D DNR				
5*	Day & Night	Auto/Schedule				
6	Digital Noise Reduction	3D DNR				
7*	WDR	True WDR 120dB or better				
8	Lens Type	2.8 ~ 12mm Motorized Zoom Lens or Better				
9*	Video Compression	Main stream: H.265/H.264 Sub stream: H.265/H.264/MJPEG Third stream: H.265/H.264				
10*	Video Bit Rate	32 Kbps to 16 Mbps				
11*	Audio Compression	G722.1/G711ulaw/G711alaw				
12*	Resolution	3840 × 2160 or Better				
13*	Video streaming	Main stream: 50Hz: 20 fps (3840 × 2160), 25 fps (2944 × 1656, 2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 20 fps (3840 × 2160), 30 fps (2944 × 1656, 2560 × 1440, 1920 × 1080, 1280 × 720)				
		Sub stream: 50Hz: 25fps (640 × 360, 352 × 288) 60Hz: 30fps (640 × 360, 352 × 240)				
		Third stream: 50Hz: 25fps (1280 × 720, 640 × 360, 352 × 288)				

		60Hz: 30fps (1280 × 720, 640 × 360, 352 × 240)				
14*	Image Setting	Rotate mode, saturation, brightness, contrast, sharpness				
15*	Alarm Trigger	Motion detection, video tamper, network disconnect, IP address conflict, illegal login, HDD full, HDD error, Alarm input, Alarm output				
16*	Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6				
17	ONVIF	Should Support Profile S, g etc				
18*	Audio	1 Input & 1 Output				
19*	Communication Interface	1 RJ45 10M/100M				
20*	Alarm	1 Input & 1 Output				
21*	On-board storage	Support, Minimum 128 GB				
22*	Video Analytic	Should support Face Detection, Line crossing detection, intrusion detection, unattended baggage detection, object removal detection				
23*	Region of Interest	Should Support				
24*	IR Range	30 Meter or Better				
25	Certifications	UL, CE, FCC (All 3 Mandatory)				
26	Operating Conditions	Temperature: -10 °C to +60 °C Humidity: 95% or less (non-condensing)				
27*	Power Supply	12 VDC / PoE / 24 VAC				
28*	Protection Level	IP67				
		IK10				

Table-2: 8 Megapixel IR Bullet Camera with Motorized Zoom Lens**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	Image Sensor	1/2.5" Progressive Scan CMOS or Better				
2*	Min. Illumination	Color: 0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR				
3*	Shutter Speed	1/3 s to 1/100000 s, Supports Slow Shutter				
4*	Image Enhancement	Back Light Compensation (BLC), 3D DNR				
5*	Day & Night	Auto/Schedule				
6	Digital Noise Reduction	3D DNR				
7*	WDR	True WDR 120dB or better				
8	Lens Type	2.8 ~ 12mm Motorized Zoom Lens or Better				
9*	Video Compression	Main stream: H.265/H.264 Sub stream: H.265/H.264/MJPEG Third stream: H.265/H.264				
10*	Video Bit Rate	32 Kbps to 16 Mbps				
11*	Audio Compression	G722.1/G711ulaw/G711alaw				
12*	Resolution	3840 × 2160 or Better				
13*	Video streaming	Main stream: 50Hz: 20 fps (3840 × 2160), 25 fps (2944 × 1656, 2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 20 fps (3840 × 2160), 30 fps (2944 × 1656, 2560 × 1440, 1920 × 1080, 1280 × 720)				
		Sub stream: 50Hz: 25fps (640 × 360, 352 × 288) 60Hz: 30fps (640 × 360, 352 × 240)				
		Third stream: 50Hz: 25fps (1280 × 720, 640 × 360, 352 ×				

		288) 60Hz: 30fps (1280 ×720, 640 × 360, 352 × 240)				
14*	Image Setting	Rotate mode, saturation, brightness, contrast, sharpness				
15*	Alarm Trigger	Motion detection, video tamper, network disconnect, IP address conflict, illegal login, HDD full, HDD error, Alarm input, Alarm output				
16*	Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6				
17	ONVIF	Should Support				
18*	Audio	1 Input & 1 Output				
19*	Communication Interface	1 RJ45 10M/100M				
20*	Alarm	1 Input & 1 Output				
21*	On-board storage	Support, Minimum 128 GB				
22*	Video Analytic	Should support Face Detection, Line crossing detection, intrusion detection, unattended baggage detection, object removal detection				
23*	Region of Interest	Should Support				
24*	IR Range	50 Meter or Better				
25	Certifications	UL, CE, FCC (All 3 Mandatory)				
26	Operating Conditions	Temperature: -10 °C to +60 °C Humidity: 95% or less (non-condensing)				
27*	Power Supply	12 VDC / PoE / 24 VAC				
28*	Protection Level	IP67				
		IK10				

Table-3: 4 Megapixel IR Outdoor PTZ Camera**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	Image Sensor	1/2.8" progressive scan CMOS or Better				
2*	Min. Illumination	Color: 0.05 Lux @ (F1.6, AGC ON), B/W: 0.01Lux @ (F1.6, AGC ON) IR: 0 Lux				
3*	Shutter Speed	1/1 to 1/10,000s or Better				
4*	White Balance	Auto/ manual/ ATW (Auto Tracing White Balance)/ indoor/ outdoor/ fluorescent lamp/ sodium lamp				
5*	Day & Night	Auto ICR				
6	AGC	Auto / Manual				
7*	DNR	Should Support				
8	BLC	Should Support				
9*	Video Compression	Main stream: H.265/H.264 Sub stream: H.265/H.264/MJPEG Third stream: H.265/H.264				
10*	WDR	Should support Digital WDR or True WDR				
11*	Digital Zoom	16x or Better				
12*	Privacy Mask	8 Programmable Privacy Masks				
13*	Focus Mode	Auto/ Semi-automatic/ Manual				
14	SN Ratio	52dB or Higher				
	Focal Length	4.3 to 129mm, 30x Optical or Better				
15*	Aperture Range	F1.6 to F5.0				
16*	Pan Speed	Configurable, from 0.1°/s to 160°/s Preset Speed: 240°/s				

17	Movement Range (Tilt)	From -15° to 90° (auto Flip)				
18	Tilt Speed	Configurable, from 0.1°/s to 120°/s Preset Speed: 200°/s				
19	Proportional Zoom	Rotation speed can be adjusted automatically according to zoom multiples				
20	Presets	300				
21	Patrol Scan	8 Patrols, up to 32 Presets Per Patrol				
22	Pattern Scan	4 patterns, with the recording time not less than 10 minutes per pattern				
23	Power-off Memory	Should Support				
24	Park Action	Preset/ Pattern Scan/ Patrol Scan/ Auto Scan / Tilt Scan/ Random Scan/ Frame Scan/ Panorama Scan				
25	PT Status	ON/ OFF				
26	Scheduled Task	Preset/ Pattern Scan/ Patrol Scan/ Auto Scan / Tilt Scan/ Random Scan/ Frame Scan/ Panorama Scan/ Dome Reboot/ Dome Adjust				
27	IR Distance	200 Meter or Higher				
28	IR Angle	Adjustable according the focal length				
29	Network Interface	1 RJ45 10M/100M Ethernet Interface				
30	Main Stream	50Hz: 25fps (2592×1520, 2048×1536,1920×1080,1280×960,1280×720), 50fps (1280×960,1280×720) ; 60Hz: 30fps(2592×1520, 2048×1536,1920×1080,1280×960,1280×720), 60fps (1280×960,1280×720)				
	Sub Stream	50Hz: 25fps (704 × 576), 25fps (640 × 480), 25fps (320 × 288) 60Hz: 30fps (704 × 480), 30fps (640 × 480), 30fps (320 × 240)				
	Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480, 320 × 288) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480, 320 × 240)				
31	Video Compression	H.264 / MJPEG				
32	Audio compression	G.711alaw/ G.711ulaw/ G.722/ G.726				
33*	Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS,				

		NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE,				
34	Security Measures	User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering				
35	ONVIF	Should Support				
36*	Audio	1 Input & 1 Output				
37*	Alarm	1 Input & 1 Output				
38*	On-board storage	Support, Minimum 128 GB				
39	Certifications	UL, CE, FCC (All 3 Mandatory)				
40	Operating Conditions	Temperature: -10 °C to +65 °C Humidity: 90% or less (non-condensing)				
41*	Power Supply	AC 24V and Hi-PoE				
42*	Protection Level	IP67				
		IK10				
		TVS 4000V Lightning Protection, Surge Protection and Voltage Transient Protection				

Table-5: 32 Channel Network Server (Expandable upto 64 Channel & Video Management System)

Make:

Model:

O.S:

Firmware:

Sl. No	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	System Should Support 32 Channels of IP Camera Inputs				
2*	System Shall be Capable of being expanded to 64 channels				
3*	Recorder shall be capable of recording all 32 cameras at 720p 25fps under H.265 compression mode				
4*	Recorder shall be capable of recording video on various sequences-continuous, motion based, period based etc. The actual mode of recording shall be configured based on user inputs				
5*	Video Recorder shall be 120 GB of Onboard				

	SSD					
6	Video Recorder processor shall be Minimum Gen 4 Intel Core i3					
7*	Video Recorder shall Support 30TB of Storage					
8	Video Recorder shall support dual display HDMI & VGA					
9*	Video Recorder shall be BIS, CE, FCC & UL Listed					
10*	The Video Management System (VMS) software shall be used to view live and recorded video from IP devices connected to local and wide area networks					
11*	The Video Management Software shall support the Windows 10, Windows Server 2016					
12*	The VMS software shall have a client/server-based architecture that can be configured as a standalone VMS system with the client software running on the server hardware and/or the client running on any network-connected TCP/IP workstation.					
13*	Multiple client workstations shall be capable of simultaneously viewing live and/or recorded video from one or more servers.					
14	The VMS shall not charge for the number of concurrent clients					
15*	The VMS system shall utilize manufacturer built servers, commercial-off-the-shelf (COTS) computer workstations, servers, IP edge devices that allow for third-party application installation, networking devices and storage equipment.					
16*	Recording of all video transmitted to the VMS shall be continuous, uninterrupted and unattended.					
17	The VMS system shall offer the capability of video motion detection recording, such that video is recorded when the NVRMS detects motion within a region of interest of the camera's view. Video prior to the detection of the motion shall also be stored with recording using the pre-recorded feature					
18	The VMS system shall manage the video it has been configured to monitor. Loss of video signal shall be configured to announce on VMS client by an on-screen visual indication alerting operators of video loss.					
19	The VMS software shall have an open architecture supporting IP cameras and encoders from multiple manufacturers providing best-of-breed solutions ranging from low-cost, entry-level features to high-resolution, megapixel features.					
20	The VMS client software shall be able to view live video and audio, recorded video and audio and be able to configure the complete system all from a single					

	application					
21	The VMS shall continue to record video and audio at all times during the administration and configuration of any feature.					
22	The VMS client software shall have the same functionality when connected remotely as it does when it is run locally on the same computer as the server software.					
23	The VMS client software shall add and remove features based on the permissions of the user and the licensed functionality.					
24	The VMS client software shall have Capability to support Multiple operating systems like Windows, Linux on all of the following operating systems: 1) Microsoft Windows Server 2008/2008R2/2012 2) Microsoft Windows XP (all versions) 3) Microsoft Windows Vista (all versions) 4) Microsoft Windows 7 (all versions) 5) Linux Ubuntu 6) Mac OSX (Operating on Intel CPU)					
25	The VMS software shall allow the user to have any combination of VMS client applications running on any of the supported operating systems and be able to connect to any of the VMS servers running on any of the supported operating systems. For example, a VMS client running on Microsoft Windows 7 shall be able to simultaneously connect to four (4) different VMS servers all running on different operating systems, such as Windows Server 2003, Windows XP, Vista and Linux.					
26	The VMS software shall have the capability to run multiple client applications simultaneously on one workstation with multiple monitors.					
27	The VMS shall also allow an authorized user to view video through a web client interface. The web client interface shall allow authorized users to view live video, view recorded video, control pan-tilt zoom (PTZ) cameras and activate triggers. The web client interface shall allow connections to multiple VMS servers simultaneously.					
28	The web client interface shall operate without requiring installation of any software.					
29	The web client interface shall support the following browsers: 1) Internet Explorer 6 and later 2) Firefox 2 and later 3) Opera 9 and later 4) Safari and later 5) Chrome 6) The web client interface shall also connect with non-JavaScript browsers and shall be compliant with HTML 4.0					
30	The VMS server software shall record and retrieve video, audio and alarm data and					

	provide it to the VMS clients upon request					
31	The VMS software shall provide at no additional charge a purpose built mobile application capable of viewing multiple simultaneous live video streams and playing a recorded video stream. Application shall be provided for both iOS and Android operating systems.					
32	The VMS server software shall operate on any of the following operating systems: 1) Microsoft Windows Server 2003/2008 2) Microsoft Windows XP (all versions) 3) Microsoft Windows Vista (all versions) 4) Microsoft Windows 7 (all versions) 5) Linux Ubuntu 8.04/10.04 Debian Package change Linux Ubuntu 10.04, 12.04, 14.04					
33*	The VMS server shall not decode video for the purpose of motion detection.					
34	The VMS server shall not decode video for the purpose of repacking it for transmission to clients.					
35	The VMS server software shall record video based on metadata generated by an edge network device. The edge network devices shall generate the metadata and transmit it with the video stream to the VMS server software.					
36*	The VMS shall license the total number of cameras on the system. This license shall be based on the MAC address of a single network card that is present on the system. The VMS shall only require that this network card be enabled and does not require that data is actually sent through it.					
37*	The VMS shall allow for a user's permissions to be configured across multiple servers from a single screen					
38*	The VMS shall allow the use of maps. The maps will be accessible to users with the appropriate permission levels and display video sources and their status.					
39	The VMS allows soft triggers to be placed, viewed and triggered from a map.					
40	The VMS shall have a single page that displays the status of all servers and cameras currently connected. This page shall display any alarms, events, MAC addresses, camera configuration, format and frame rate from each individual camera					
41*	The VMS shall support the use of a panoramic lens on an analog or IP camera. The VMS client shall de-warp the image on both live and recorded video.					
42*	The VMS software shall have three methods of allowing third-party integration: command line, API and web SDK. The command line shall allow for the most basic of interfaces, calling up the appropriate video when requested using command line functionality. The API shall allow for a					

	deeper interface, allowing video to be transmitted from the VMS software into the party software interface. The web SDK shall use the web server to transcode the video and send it to the third-party software interface. The web SDK method shall use standard HTML, XML, CGI and JavaScript commands.					
VIDEO MANAGEMENT SYSTEM SOFTWARE FEATURES						
1	A) The VMS shall allow the customization of the user interface to allow software triggers to be shown. This shall allow them to activate events which could trigger recording, PTZ presets, output triggers or email					
2	B) The VMS software shall allow control of PTZ cameras to authorized users and be used to maneuver a PTZ camera. When used on a non-PTZ camera, it shall allow you to digitally pan, tilt and zoom on any video whether in live or recorded mode.					
3	C) The VMS software shall have a feature for viewing logical groups of cameras. This shall allow efficient viewing of cameras in a logical order.					
4	D) The VMS software shall have a feature to organize your cameras into preset views. Views are preconfigured arrangements of the video panels so that they may be easily recalled later. Customized views should be created on demand.					
5	E) The VMS software shall have the capability to automatically cycle through two or more saved views to create a video tour. The VMS shall allow the configuration of the dwell time and the different views it shall use					
6	F) The VMS client software shall be used to search for and play back recorded video, audio and events from VMS servers.					
7	G) The VMS software shall have the capability to search for and play back video from multiple cameras simultaneously. All recorded video shall be played back and displayed in a synchronized multi-camera layout.					
8	H) The VMS software shall support searching through recorded video based on time, date, video source and image region and have the results displayed as both a clickable timeline and a series of thumbnail images.					
9	I) The VMS software shall allow search and play back of audio in synchronization with video.					
10	J) The VMS software shall allow you to search on a specific area of recorded video and only display the frames where motion happened in that area.					
11	K) The VMS software shall have the capability to export video, audio files to run					

	on file player and standard players.					
12	<p>L) The VMS software shall provide the option of exporting the file in the following formats :</p> <p>1) Standalone Exe (*.exe) – includes an executable player with the video and audio data</p> <p>2) AVI File (*.avi) – a multimedia container format</p> <p>3) PS File (*.ps) – a format for multiplexing video and audio</p> <p>4) QuickTime File (*.mov) – native for Macintosh computers</p>					
13	<p>M) The VMS standalone player shall package all of the exported video into a single executable. The VMS standalone player shall be able to authenticate that the video has not been tampered with using a keyed Hash Message Authentication Code (HMAC).</p>					
14	<p>N) The VMS system shall be able to display system information about users that are currently logged into the system, plug-in file version information number and status, and a system log that contains a detailed history of the processes that occur on the system. The VMS shall have the feature of suspect search.</p>					
15	<p>O) The VMS system shall have the ability to record an audit trail of when users log in that shows what changes they have made, what video they have viewed and what they have exported.</p>					
16	<p>P) The VMS system shall allow the configuration of the video devices to be performed in the client and pushed out to the devices. The configuration itself is stored both on the camera and on the VMS.</p>					
17	<p>Q) The VMS shall allow for the configuration of rules of how to record the video. These rules shall allow you to set a maximum number of days or minimum number of days on a per video stream basis.</p>					
18	<p>R) The VMS shall not require a database when recording video.</p>					
19	<p>S) The VMS software shall be able to send a predefined email based on an event trigger. The VMS software shall also support SSL and TLS connections for transmissions of the mail.</p>					
20	<p>T) The VMS software shall be used to connect different types of events, such as input triggers, to a desired action such as recording video or triggering an alarm. The VMS software shall recognize the following event types: 1) Video Motion, 2) Video Loss,3) Input Trigger 4) IP Camera Connection,5) Software Trigger</p>					

Table-6: Workstation**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/ Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks
1*	Type	Tower				
2*	RAM	8 GB DDR4 RAM or better				
3	Operating System	Windows 10 Pro for Workstation 64 Installed				
4*	Hard Disk	1 TB 7200 RPM SATA Hard Drive				
5	Optical Drive	9.5 mm Slim DVD-Writer				
6*	Graphics Card	NVIDIA" 2GB dedicated				
7	Mouse	USB Optical Mouse				
8	Keyboard	USB Business Slim Keyboard				
9	Network	Onboard Gigabit (10/100/1000 Mbps) Ethernet Controller				

Table-7: Wall mounted Console**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/ Data sheet complying the quoted specification highlighted & hyperlinked	Compliance Yes/ No	Remarks (if any)
1*	Panel Technology	IPS				
2	Screen Size	43" or Higher				
3*	Aspect Ratio	16:09				
4*	Native Resolution	1,920 x 1,080 (Full HD) or Better				
5*	Brightness	350cd/m2 or higher				
6	Contrast Ratio	1,100 : 1 or higher				
7	Response Time	12 ms (G to G BW), 9.4 ms (WOT)				
8*	Orientation	Landscape & Portrait (Optional)				
9*	Surface Treatment	AGP Haze 1%				
10	Circuit board Protection	Dust, Iron Powder, Humidity, Etc.				
11	Viewing Angle (H x V)	178 x 178 degree or Better				
12*	Inputs	HDMI (2), DVI-D, RGB, Audio, USB				
13*	Outputs	Audio				
14*	External Control	RS232C In/out, RJ45 In, IR In				
15*	Operation Temperature	0 °C to 40 °C or Better				
16	Operation Humidity	10 % to 80 %				
17	Power Supply	100-240V~, 50/60Hz				
18	Operating Hours	Minimum 18 Hrs or More				
19	Safety	IEC / EN / UL				
20	EMC	FCC Class "A" / CE / KCC				
21	Energy Star	energy star 7.0 .				

Table-8: 8 Port 10/100/100 PoE Switch**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	No of Ports Count	10 Nos.				
2*	100/1000 Mbps Ports	09 Nos.				
3	Gigabit SFP Port	01 Nos				
4*	Configurable extended Range Ports	02 Nos.				
5*	PoE Ports	08 Port				
6*	Total PoE Budget(watt)	130 Watt				
7*	Extended Range Mode,	Support upto 250 Meters				
8	PoE 802.3at	Yes				
9	Switching capacity	20 Gbps				
10	Forwarding rate	14.8 Mpps				
11	Packet buffer (byte)	525 K				
12	MAC address table	8K				
13*	Power Input	100 - 240 V AC, 50/60 Hz				
14	Operating Temperature	-20°C to 50°C/ -4°F to 122°F				
15	Humidity	5% to 95% non-condensing				
16	MTBF (hr)	347760				
17	Certifications	CE, FCC, C-Tick, RoHS				
18*	Lightning surge Protection	Support				

Table-9: 28 Port 100/1000 Smart Managed Switch**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	No of Ports Count	28 Nos.				
2*	100/1000 Mbps Ports	24 Nos.				
3*	Gigabit Combo (SFP/RJ-45)	04 Nos				
4*	Switching capacity	56 Gbps				
5	Forwarding Rate	41.67 Mbps				
6	Packet buffer (byte)	1.5 M				
7	MAC Address Table	16 K				
8	Power Input	100 - 240 V AC, 50/60 Hz				
9*	Green Feature	Yes				
10*	Operating Temperature	0°C to 50°C/32°F to 122°F				
11*	Operating Humidity	10% to 90% (non-condensing)				
12	Certifications	FCC, CE, RoHS				

Table-10: 100/1000 Single Mode SFP Module**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	Connector	LC				
2*	Wavelength (nm)	1310				
3*	Max Transmission Distance (km/yd)	10/10936				
4*	Optical Fiber Type	Single Mode				
5	With DDMI Features	Yes				
6	Transmit power range (dBm)	-3 to -9.5				
7	Receive power range (dBm)	-3 to -20				

Table-11: 3 KVA Online UPS with 1 Hours Backup**Make:****Model:****O.S:****Firmware:**

Sl. No	Description	Minimum Guiding Specification	Specification quoted by the Bidder	Page number of product brochure/Data sheet complying the quoted specification(highlighted & hyperlinked)	Compliance Yes/ No	Remarks (if any)
1*	Power Rating	3kVA / 2.7KW				
2*	Input Nominal Voltage	220/230/240 Vac				
3*	Input Voltage range	175 ~ 280 Vac (full load); 80~175 Vac (50%-100% load)				
4*	Input Frequency	50/60 Hz \pm 10 Hz				
5	Input Power Factor	> 0.99 (full load)				
6	Input Current Harmonic Distortion	<3%				
7	Output Power Factor	0.9				
8	Output Voltage	220/230/240 Vac				
9	Output Frequency	50/60 Hz \pm 0.05 Hz				
10	Output Current Harmonic Distortion	< 3% (linear load)				
11	Output Overload Capability	< 105%: continuous; < 105% ~ 125% 1 minutes, 125% ~ 150% 30 seconds				
12	Crest Factor	3:01				
13	Receptacle	IEC C13x6, C19x1				
14	Efficiency	93% or better				
15	Battery Charge Current	1A				
16	Display	LCD panel				

17	Operating Temperature	0 ~ 40° C				
18	Relative Humidity	5% ~ 95% (no condensing)				
19	Battery	6 Nos. 12 V 42 AMP SMF Battery (1 Hr. considering 60% load)				
20	Battery Bank Rack	Heavy Iron Rack with battery interlink terminals				

OEM Eligibility Criteria : -----

S/N	Specific Requirements	Documents Required
1	Direct presence in India for more than 10 years as on bid submission date (not as joint venture, partnership firms or through any other association)	Camera OEM should submit a declaration letter along with letter of incorporation confirming the same.
2	The CCTV Camera & Server OEM(s) should be a profit making company and should have a positive average net worth for 3 financial year.	Audited Financial Statements for the financial year 2015-16, 2016-17 and 2017-18,
3	The CCTV Camera & Server OEM should have atleast 5 project references of any Campus Surveillance/premises surveillance/City Surveillance or smart city projects in India with total of minimum 1000 cameras.	PO Award copies / work completion certificates to be submitted
4	Bidder along with OEMs of major items (like CCTV Camera of all types, VMS Software, VMS Servers, Storages, switches etc.) should not have been blacklisted in last 3 years by any Ministry under Government of India or by Government of any State in India or any of the Government PSUs as on Quotation floating date.	Certificate / affidavit mentioning that the Bidder is not blacklisted by any Ministry under Government of India or by Government of any State in India or any of the Government PSUs.
5	The CCTV Camera & Server OEM should have own RMA set up in India for last 3 years from the date of submission of bid (not as joint venture, partnership firms or through any other association)	OEM's GST registration document clearly mentioning service tax no. to be given as proof.
6	OEM of CCTV camera & Server must be ISO 9001:2008 or ISO 9001:2015 certified	Documentary proof to be submitted.
7	The MAC address of the IP cameras must be registered in the same name of OEM supplying the cameras.	Proof to be provided by the OEM
8	The CCTV OEM should be in the line of CCTV manufacturing and supply for more than 15 years Globally. Information should be available in Public domain.	Valid document to be provided for verification

9	OEM of CCTV camera and VMS must be in top 15 in both market share for physical security equipment and security services in IHS ranking in the world in last 5 years.	IHS Ranking report to be submitted
10	The CCTV OEM should have its toll free number in India for any technical support query from the SI or end customer .	Toll free nos should be mentioned in the manufacturer's authorization letter and submitted along with the bid.
11	No Malicious Code” Under taking Letter By OEM from the Global HQ. The OEM must not be barred by any of the global CERT organization for Malicious Codes or Security threats.	Undertaking by the OEM on the Letterhead confirming the same.
12	The CCTV OEM need to confirm in their letterhead that any component/ hardware / parts / assembly / software including firmware used in the offered solution (hardware / software) DO NOT comply to GB28181, GB/T 28181-2011; GB/T28181-2011; GBT 28181-2011; GBT28181-2011 standards	Documentary evidence from OEM

Bidder / System Integrator's Pre Qualification Criteria :-

Specific Requirements	Documents Required
1) The Bidder / System Integrator should have its own company registered in India (under incorporation of Companies Act, 1956/ 2013) more than Five year period. Any proprietary or partnership firm will not allow to bid this Quotation. This has to be supported by necessary statutory documents.	Incorporation certificate & MOA should be submitted.
2) The Bidder / System Integrator should have its own registered office & service center in West Bengal for last three years.	Documentary proof to be submitted
3) The Bidder / System Integrator prefferably an ISO 9001:2008 or ISO 9001:2015 certified organization.	Documentary proof to be submitted
3) The Bidder / System Integrator must have minimum 02 Nos. Degree (B.E. / B. Tech) holder employee in their payroll.	A declaration is required on letter head along with their Name, Employee No, PF No)

Section-IV

Forms

Form 1: Application

<Application for participating in the Quotation is to be made on printed Letterhead of the Applicant including full postal address, telephone, faxes and e-mail address>

Date: _____

To

The Assistant Chief Engineer

West Bengal Police Housing & Infrastructure Development Corporation Limited.

Subject: Submission of Proposal for Supply, Installation, Testing , Commissioning & Maintenance of CCTV Camera security surveillance system at Bankura,Birbhum, Purba Bardhaman, Paschim Medinipur Dist. and Asansol-Durgapur Commissionerate .

Dear Sir,

1. We are submitting this Proposal for the work mentioned above and our Proposal is valid for a period of 120 days from the last date of submission of the Quotation.
2. We understand that WBPHIDCL is not bound to accept any or all Proposals it may receive.
3. We declare that we have disclosed all material information, facts and circumstances, which would be relevant to and have a bearing on the evaluation of our Quotation and qualification.
4. We do, also, certify that all the statements made and/or any information provided in our bid are true and correct and complete in all aspects.
5. We declare that in the event that WBPHIDCL discovers anything contrary to our above declarations, it is empowered to disqualify us and our Quotation from further participation in the Bid evaluation process and to cancel the contract at any time during the contract period.
6. If our Proposal is accepted, we will furnish the Initial Security Deposit for a sum of five percent (5%), of the overall contract value.

Dated this _____ date of _____ 2018,

(Signature)

Name:

Designation:

Name of Firm:

Company Seal:

Form 2: Certificate regarding Summary Statement of Yearly Turnover from Contractual Business

This is to certify that the following statement is the summary of the audited Balance Sheet arrived from contractual business in favour of.....

for the three consecutive years or for such period since inception of the Firm, if it was set in less than such three year's period.

Sl. No.	Financial Year	Turnover (rounded up to two digit after decimal) in lakh	Net Profit (rounded up to two digit after decimal) in lakh	Remarks
1	2016-17			
2	2017-18			
3	2018-19			
Total				

Note:

1. Turnover is to be expressed in lakh of rupees, rounded up to two digits after decimal.
2. In case, the firm was set up in less than 3 year's period, mention the year of inception in the 'Remarks' column.

iii) Net worth of the Company for the last financial year (2018-19) _____.

<p>.....</p> <p>.....</p> <p>Signature, name and designation of Authorised Signatory</p> <p>For and on behalf of</p> <p>.....(Name of the applicant)</p>

<p>.....</p> <p>.....</p> <p>Name of the Statutory Auditor's Firm</p> <p>Seal of the Audit Firm:</p> <p>(Signature, name and designation and membership No. of the authorized signatory)</p>

Form 3: Declaration against Common Interest

I/We, Sri/Smt. _____, the authorized signatory on
behalf of do hereby affirm
that I/We/any of the member of..... bidding
against NIQ No. ___ Sl. No. _____ do not have any common interest either as a partner
on any partnership firm / consortium as a Proprietor / Owner of any other firm in the same
serial for the work I / We want to participate.

Date:

Signature of bidder

Form 4: FORMAT FOR BIDDERS'S DETAILS

1	Name of the Firm	
2	Registered Office Address	
	Contact Number	
	Fax Number	
	E-mail	
3	Correspondence / Contact address	
	Name & Designation of Contact person	
	Address	
	Contact Number	
	Fax Number	
	E-mail	
4	Is the firm a registered company? If yes, submit documentary proof Year and Place of the establishment of the company	
5	Former name of the company, if any	
6	Is the firm <ul style="list-style-type: none"> • a Government/ Public Sector Undertaking • a propriety firm • a partnership firm (if yes, give partnership deed) • a limited company or limited corporation • a member of a group of companies, (if yes, give name and address and description of other companies) • a subsidiary of a large corporation (if yes give the name and Address of the parent organization). If the company is subsidiary, state what involvement if any, will the parent Company has in the project. 	
7	PAN No.	
8	Is the firm has GSTIN? If yes, submit valid GST Registration certificate.	
9	Total number of employees. Attach the organizational chart and location of your headquarter and service centers showing The structure of the organization with availability of technical manpower.	
10	Are you registered with any Government/ Department/ Public Sector Undertaking (if yes, give details)	
11	How many years has your organization been in business under your Present name? What were your fields when you established your Organization?	
12	Is the bidder a member of a Consortium? If yes, please mention whether Principal Bidder or Member.	
13	What type best describes your firm? (Purchaser reserves the right to verify the claims if necessary) <ul style="list-style-type: none"> • Manufacturer • Supplier 	

	<ul style="list-style-type: none"> • System Integrator • Consultant • Service Provider (Pl. specify details) • Software Development • Total Solution provider (Design, Supply , Integration,(O&M) • IT Company 	
14	Number of Offices in district headquarters in West Bengal	
15	Is your organization has ISO 9001:2008 certificates?	
16	List the major clients with whom your organization has been / is Currently associated.(Mention name of clients with address, year of installation and value of orders.)	
17	Have you in any capacity not completed any work awarded to you? (If so, give the name of project and reason for not completing the work)	
18	Have you ever been denied Quotationing facilities by any Government / Department / Public sector Undertaking? (Give details)	

Authorized Signatory (Signature In full): _____

Name and title of Signatory: _____

Company Rubber Stamp: _____

List of enclosures:

1. Copies of registration with SSI/NSIC or ISO 9000 certification, if any.
2. Copies of Work Order (as mentioned in column 16) with satisfactory competition certificates.

Form 5: Reference Site Details**(Bidder shall give three reference site details completed during the last three Financial Years)**

1) Name of the company	
Address of the company	
Name, designation of contact person with telephone No. and e-mail id.	Name : Designation : Landline No. : Cell No. : E-mail id. :
Details of CCTV System supplied (Ref. No. date of order and value)	
2) Name of the company	
Address of the company	
Name, designation of contact person with telephone No. and e-mail id.	Name : Designation : Landline No. : Cell No. : E-mail id. :
3) Name of the company	
Address of the company	
Name, designation of contact person with telephone No. and e-mail id.	Name : Designation : Landline No. : Cell No. : E-mail id. :
Details of CCTV System supplied (Ref. No. date of order and value)	

Form 6:

Affidavit in non-judicial stamp paper certified by notary public or 1st class magistrate

1. The undersigned also hereby certifies that our firm M/S. _____
_____ or any of constituent partner had not blacklisted nor were any of the contract/ services terminated with/by any of the Central/ State Government Ministries/ Affiliates or UT Government/ PSU Organizations for projects in India during last 5 (five) years prior to the date of this N.I.T.
2. We are not being under ineligibility for corrupt or fraudulent practices.
3. We have not been declared insolvent/ bankrupt or have not filed for insolvency/ bankruptcy or in the process of being declared bankrupt before any designated authority in any country.
4. The undersigned would authorize and request any Band, person, Firm or Corporation to furnish pertinent information as deemed necessary and / or as requested by WEST BENGAL POLICE HOUSING & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED to verify this statement.
5. The undersigned understands that further qualifying information may be requested and agrees to furnish any such information at the request of WEST BENGAL POLICE HOUSING & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED
6. Certified that I have applied in the Quotation in the capacity of individual / as a partner of a firm & I have not applied severally for the same job.
7. The undersigned do certify that all the statements made in the attached documents are true and correct. If any declaration submitted is found/ascertain to be incorrect/fabricated/misrepresented/fraudulent etc. accordingly Quotation will be liable to be cancelled/terminated immediately & I/my firm/company shall also be liable to prosecuted under section 197,199&200 of Indian Penal Code, 1860 along with section 71 & Section 73 of Indian Information & Technology Act 2008 & any other applicable law for the time being in force in addition to forfeiture of Earnest Money/Security Deposit.

Dated : _____

Signature of applicant including title and capacity in which

application is made
and
the name of the Firm with Seal.

Form 7: UN-PRICED Bill of Quantities

Sl. No	Item Description	Make and Model	Specification as mentioned
1	1/2.8" Progressive Scan CMOS 4 MP IR PTZ Cam, 2592x1520@30fps Resolution, 30x optical zoom, 16x digital zoom, Focal Length 4.3 to 129mm, Digital WDR, 200m IR distance, 24VAC & Hi-PoE, Support Micro SD Card, up to 128 GB, Onvif, IP67 Standard; TVS 4000V Lightning Protection, Surge Protection and Voltage Transient Protection, IK10 Rated Housing, FCC, CE.(Make-Bosch / Pelco / Tyco / Axis/Honeywell)		
2	1/2.5" Progressive Scan CMOS 8 MP IR Dome Camera, 120dB WDR, 2.8 – 12mm Motorized Varifocal Lens, 30m IR Range, Triple Stream, DC12V/PoE, IP67 & IK10, 3-Axis Adjustment, Video Compression H.265, Onvif, Micro SD Support, up to 128 GB, UL, CE, FCC.(Make-Bosch / Pelco / Tyco / Axis/Honeywell)		
3	1/2.5" Progressive Scan CMOS 8 MP IR Bullet Camera, 120dB WDR, 2.8 – 12mm Motorized Varifocal Lens, 50m IR Range, Triple Stream, DC12V/PoE, IP67 & IK10, 3-Axis Adjustment, Video Compression H.265, Onvif, Support Micro SD Card up to 128 GB, UL, CE, FCC.(Make-Bosch / Pelco / Tyco / Axis/Honeywell)		
4	2 U Video recording Server for 32 IP Camera use, expandable upto 64 Ch, Dual NIC Cards, HDMI, VME Port, 3 SATA Hard Drives upto 30TB Storage Support, Typical Video Storage Rate (Mbps) 300 Mbps (Windows) / 450 Mbps (Linux), Rack Mount, with video management recording licenses CE, FCC, UL Listed.(Make-Bosch / Pelco / Tyco / Axis/Honeywell)		
5	24V AC 2.5 Amp Power Supply for PTZ Camera(Reputed Make)		
6	10 TB SATA Surveillance Hard Disk(WD/Seagate)		
7	Client Workstation for Viewing - 8th Generation Intel Core i5 processor, Intel Q370, 8 GB DDR4 RAM, NVIDIA 2 GB Graphics Card, Operating System Windows 10 Pro 64 Bit Installed.(make-HP / Dell / Fujitsu / IBM)		
8	43" IPS Panel with HDMI Output, Resolution 1,920 x 1,080 (FHD), Operating 18 Hours, (Make-Sony / LG / Panasonic / Samsung)		
9	8 Port GbE Unmanaged PoE Switch with GbE Up to 1 Gigabit SFP, 8 PoE Ports, PoE budget 130 watt, Switching capacity 20 Gbps, Operating Temperature -20°C to 50°C/ -4°F to 122°F(Make- Allied Telesis / Zyxel/HP/ Netgear).		
10	24 Port GbE L2 Switch, 24 Port 100/1000 Mbps, 1 Port 1 Gigabit SFP.(Make- Allied Telesis / Zyxel/HP/ Netgear).		
11	32U Floor Mount Server Rack with Fan, PDU & other required accessories. (Valrack)		
12	Indoor / Outdoor Rack PoE Switch & other required accessories.(Reputed make)		
13	100/1000 Single Mode SFP Module(Make-HP/ Netgear / Allied Telesis / Zyxel)		
14	5 Meter SC- SC FO Patch Cord(Dlink/Digisol)		
15	3 KVA Online UPS with 1 Hours Backup (Make-Hitachi / Delta / Numeric / BPE) with required n		

	battery(Make-Exide/ Amaron)		
16	5 Meter Length HDMI Cable with DP Convertor		
17	8 SPN Double Door Fully Load DB Box (Legrand/Havells/Siemens)		
18	Power Distribution Unit (5 Pin 5 Amp Socket X 5 Nos)		
19	Double Pole Miniature Circuit Breaker with Gan, Box		
20	Termination Junction Box for OFC		
21	UTP CAT-6 Cable with Laying		
22	3 Core 1.5 sq MM Un-Armoured Power Cable wi Laying(Pollycab/Havells/Gloster)		
23	6 Core Single Mode Un-Armoured Optical Fiber Cable with HDPE Outer with Laying(Pollycab/Havells/Finolex/Molex)		
24	RJ-45 Connector		
25	UTP CAT-6 Patch Cord 2 Meters		
26	20 MM ISI PVC straight Pipe or Dalda Pipe or 1.5 PVC Cassing with all accessories(Reputed Make)		
27	GI Pole Supply, Installation with necessary Foundation work		
28	Customize Camera Fixing Breacket with Junction box Bullet Camera		
29	Splicing Charge for OFC Cable		
30	Supply, Installation, Testing, Commissioning		
31	Comprehensive onsite Warranty and maintenanc of the whole system for 5 years(3years warranty+2years post warranty maintence)		

(C) Command and Control room

Location	Power Supply and wiring	Furniture Sufficiency

(D) Overall Site readiness

Camera	Network	Server room	Command and control room

(Signature of contractor with Stamp)

(Signature of representative of WBPHIDCL with stamp)

(Signature of End user with stamp)