

H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD.
(A Unit of H.P. Government Undertaking)



**Request for Proposal
For
Supply and Installation of CCTV Cameras in the High Court of Himachal Pradesh & District Judiciary of Himachal Pradesh
Including Oversight Terminal at High Court of Himachal Pradesh**

(E-Tender No: **SEDC/HPHC/CCTV/2K23-11889**)

H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD.,
1st FLOOR, I.T BHAWAN, MEHLI, SHIMLA-171013, H.P.
Tel. Nos.: 0177-2623259, 2623043, 2623513 (Telefax): 0177-2626320.
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Website: www.hpsedc.in, tender document can also be downloaded from
<https://hptenders.gov.in>

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Terms and Definitions:

1. **‘Purchaser’**, also referred as ‘Client’ or ‘buyer’ means the HPSEDC/High Court of Himachal Pradesh or any authorized representative
2. **‘HPSEDC’** means Himachal Pradesh State Electronics Development Corporation
3. **‘PO’** means the Purchase Order issued by the purchaser to the successful bidder.
4. **‘EMD’** means the Earnest Money Deposit
5. **‘DD’** means Demand Draft
6. **‘BC’** means Banker’s Cheque
7. **‘Manufacturer’** means Original Equipment Manufacturer.
8. **“PBG”** means Performance Bank Guarantee from Nationalized Bank
9. **“Authorized Representative”** shall mean any person authorized by either of the parties.
10. **“Bidder”** means any firm offering the solution(s), service(s) and /or materials required in the RFP. The word Bidder when used in the pre-award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the **successful Bidder** or **Vendor** with whom the client signs the agreement for rendering of services.
11. **‘Supplier’** means Successful Bidder(s), to whom, the tender quantity is distributed
12. **“Contract”** is used synonymously with Agreement.
13. **“Default Notice”** shall mean the written notice of Default of the Agreement issued by one Party to the other in terms hereof.
14. **“Final Acceptance Test (FAT)”** means the acceptance testing of the Equipment/Service.
15. **“Fraudulent Practice”** means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the Client of the benefits of free and open competition.
16. **“Implementation Period”** shall mean the period from the date of signing of the Agreement and up to the completion of time period of contract.
17. **“Law”** shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Central Government and/ or the Government of Himachal Pradesh or any other Government or regulatory authority or political subdivision of government agency.
18. **“LOI”** means issuing of Letter of Intent which shall constitute the intention of the purchaser to place the Purchase Order with the successful bidder.
19. **“Party”** means Client or Bidder, individually and **“Parties”** mean Client and Bidder, collectively.

20. **“Request for Proposal (RFP)”**, means this detailed notification seeking a set of solution(s), services(s), materials and/or any combination of them.
21. **“Requirements”** shall mean and include schedules, details, description, statement of technical data, performance characteristics, standards, (Indian as well as International) as applicable and specified in the RFP.
22. **“Service”** means provision of Contracted service as per this RFP.
23. **“Site”** shall mean the location(s) for which the Contract has been issued and where the service shall be provided as per agreement.
24. **“State”** shall mean the State of Himachal Pradesh.
25. **“CCTV Solution Provider”** means the successful bidder, appointed for Providing the CCTV Solution.
26. **“Termination Notice”** means the written notice of termination of the Agreement issued by one Party to the other in terms hereof.

1. Bidding Details

A. HPSEDC invites online bids from reputed and qualified CCTV Camera Manufacturer/Stockiest/Dealers/Distributors for supply and installation of CCTV Cameras (with Audio Recordings) in the High Court and District Judiciary in the State of H.P. and availability of Oversight Terminal with High Court of H.P. as per technical specifications, tender conditions and other details given along with this tender document.

B. Bid Preparation:

- a. Payment of Tender Document Fee & EMD of online Bids: The payment for Tender document fee and EMD can be made through Demand Draft/RTGS. Any bid, submitted without Tender Document Fee and EMD or with the lesser amount may be rejected being non-responsive. The bidder should ensure that Tender Document Fee and EMD has been deposited with HPSEDC. HPSEDC shall not be responsible for any kind of postal delay in receiving the Tender Document Fee and EMD.
- b. The bidders shall upload their eligibility and technical offer containing documents, qualifying criteria, technical specifications and all other terms and conditions except the rates (price bid).
- c. The bidders shall quote the prices in price bid format only.
- d. If bidder fails to complete the Online Bid Preparation at Submission stage within the stipulated date and time, his/hers bid will be considered as bid not submitted, and hence not appear during tender opening stage
- e. Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal <https://www.hptenders.gov.in>
- f. For help manual please refer to the 'Home Page' of the e-Procurement website at <https://www.hptenders.gov.in>, and click on the available link 'How to .. ?' to download the file.
- g. Post registration, bidder shall proceed for bidding by using both his digital certificates (one each for encryption and signing). Bidder shall proceed to select the tender he is interested in.
- h. Any clarifications / revision in tender document on this tender shall only be uploaded on the e-Procurement portal <https://hptenders.gov.in> and www.hpsedc.in

- i. The bidder shall upload the following e-Bid documents on www.hptenders.gov.in:
 - i. Pre-Qualification Bid documents in the section **“Pre-Qualification cum Technical Bid”**
 - ii. Financial Bid documents in the section **“Financial Bid”**
- j. **Authentication of Bid:** Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during of bid preparation stage. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised to keep a backup of the certificate and also keep the copies at safe place under proper security (for its use in case of emergencies).
- k. In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate/power of attorney /lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the company/firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.
- l. In case of any change in the authorization, it shall be the responsibility of management / partners of the company/firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.
- m. The same procedure holds true for the authorized users in a private/public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.
- n. Bids will only be accepted online on e-Procurement portal at www.hptenders.gov.in
- o. Bids sent through any other mode, i.e., Post/Email/Fax etc. shall not be acceptable.
- p. The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online

activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

q. The Client may, at its discretion, extend this deadline for any administrative reason.

C. Notwithstanding anything else contained to the contrary in this Tender Document, the High Court of Himachal Pradesh, reserves the right to cancel/withdraw/ modify fully or partially the 'Invitation to Bidders' or to reject one or more of the bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.

D. The bidding details shall be as per the following table:

#	Heading	Details
1.	RFP Issuing authority	Managing Director, HPSEDC
2.	Correspondence address	H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD., 1st FLOOR, I.T BHAWAN, MEHLI, SHIMLA-171013, H.P. Tel. Nos.: 0177-2623259, 2623043
3.	RFP Name	Supply and Installation of CCTV Cameras in the High Court and District Judiciary in the State of Himachal Pradesh and oversight terminal at High Court of Himachal Pradesh
4.	RFP reference no.	SEDC/HPHC/CCTV/2K23-11889 dated 02-11-2023
5.	Tender Document Fee and Date of tender sale at www.hptenders.gov.in	Rs 5,000/- 02/11/2023
6.	Last Date of Pre-Bid Queries Submission	15/11/2023 till 2:30 PM
7.	Pre-bid meeting Date & Time [online through VC]	Pre-bid meeting will be held on 17/11/2023 at 11:30 AM through Video Conferencing. VC Link is as under: https://meet.google.com/vyr-hdcf-gen
8.	Bid Submission start date	24/11/2023
9.	Last date for receipt of bids online	11/12/2023 till 2:30 PM

#	Heading	Details
10.	Bid opening date	12/12/2023 at 2:30 PM
11.	Details to be submitted	<p>The Tender process shall be done using e-tendering solution of GoHP at www.hptenders.gov.in The online bid submission shall comprise of the following:</p> <ol style="list-style-type: none"> Checklist as provided in Annexure-1. Proof (Board resolution/ Power of attorney) stating that the person signing the bid is an authorized representative of the bidder. Proof of submission of Tender Document Fee Proof of Submission of EMD. Online Technical and Financial bid <p>✓ The bids submitted by Post/telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter</p>
12.	Language of proposal	<p>Proposals shall only be accepted in English.</p> <p>If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the Proposal, the English translation shall govern.</p> <p>It shall contain no inter-lineation or overwriting, except as necessary to correct errors made by the bidder itself. Any such corrections must be initialed by the person (or persons) who sign(s) the proposals. An authorized representative of the bidder shall initial all pages of the proposal. The representative's authorization should be confirmed by a written letter of authorization accompanying the bid.</p> <p>Please Note that prices should not be indicated in the Eligibility Criteria/Technical Proposal but should only be indicated in the Commercial Proposal. The bid shall be rejected if found any prices indicated in Eligibility Criteria/Technical Proposal.</p>

#	Heading	Details
		<p>All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid</p> <p>Conditional proposals in response to the RFP are liable to be rejected</p>
13.	EMD and Tender Document Fee details	<p>(i) Demand Draft (DD)/RTGS of Rs. 5,000/- (Rupees Five Thousand only)</p> <p>(ii) EMD Fee: Rs. 30,00,000/-</p> <p>DD / EMD may be submitted through RTGS in HPSEDC Account no. 050010200006521, IFS Code: UTIB0000050, Axis Bank, SDA Complex, Shimla-9, HP. Receipt/Copy of the demand draft/RTGS should be uploaded.</p> <p>The bid security may be forfeited:</p> <ol style="list-style-type: none"> 1 If a Bidder withdraws its bid or increases its quoted prices during the period of bid validity or its extended period without the explicit consent of the department, if any; or 2 During the whole process, if prospective/ successful Bidder indulges in any such deliberate act as would jeopardise or unnecessarily delay the process of evaluation and finalisation of offer. 3 Violates any of such important conditions of this document or indulges in any such activity as would jeopardize the interest of the Client. 4 In the case of a successful Bidder, if it fails within the specified time limit to: <ol style="list-style-type: none"> a Sign the Agreement in accordance with the conditions of this document or, b Furnish the required Performance Bank Guarantee

#	Heading	Details
		The decision of the Client regarding forfeiture of bid security shall be final & shall not be called upon question under any circumstances
14.	Financial Bid	<p>No changes in the financial bid would be allowed post submission of the online bid unless done in Reverse Auction Process (RAP) initiated by the client. The currency for the financial bid should be Indian Rupees.</p> <p>Bidders shall quote for the entire Project on a single responsibility basis on the following lines:</p> <ol style="list-style-type: none"> i. Bidders intending for commercial bid should necessarily give the commercial details in the format given in Annexure-4. All the commercial details should be given in the following format only in accordance to the details and terms and conditions as mentioned in the RFP. ii. The bid should be comprehensive and inclusive for all the services to be provided by the bidder as per scope of his work. iii. The prices quoted shall be inclusive of all taxes, levies, duties and statutory payments incident upon the bidder. The prices once provided by the bidder will be valid for the entire period of validity of the bid as defined in the bid document. iv. Any upward revision in the rates quoted by the bidder w.r.t taxes, duties, charges and levies at a later date and during the tenure of the bid will not be allowed. v. The vendor shall be responsible for the costs towards travel/stay, daily allowance or any other allowances including telephone charges with respect to their staff deployed with respect to the execution of this project before or after the award of the contract.
15.	Validity of Proposal	180 Days

#	Heading	Details
16.	Method of Selection	Least-Cost Proposal

2. Eligibility Criteria

Intending bidder should meet the following eligibility criteria for providing CCTV Solution;

S. No.	Criteria	Documents to be submitted
1.	Bidder must be an Indian Manufacturer/ Dealer/ Distributor/ Wholesaler for supply of CCTV Cameras	Copy of the Certificate of Incorporation and Certificate of Commencement of Business.
2.	The manufacturers should have experience of manufacturing and selling of quoted products for three financial years preceding the date of opening of technical bid.	Chartered Accountant's certificate in original/self-attested, showing year wise production and sales for quoted product for last three years. (Format given in Annexure -3)
3.	In case the Bidder is not the manufacturer	Authority letter/ Dealer or distributor certificate/ Wholesaler agreement/ agency certificate issued by Original Manufacturer. (Format given in Annexure -4)
4.	Bidders who have been blacklisted/ debarred by tender inviting authority or by any State Government or Central Government Department/ Organization shall not be allowed to participate in the tender process during the period of blacklisting /debarment.	Undertaking that the bidder has not been blacklisted/ debarred by any State Government or Central Government Department/ Organization
5.	GST	Copy of GST Registration
6.	PAN	Copy of PAN
7.	Financial/ market/ statutory details about firm/ company	Supplier information form (Format in Annexure - 5)
8.	Surveillance (Camera, VMS & NVR) & Networking OEM should have Indian based operation at least for a period of 7 years and should have Annual Turnover of Rs.25 Crores and above in any of last three consecutive Audited Financial years.	Relevant documents to be attached
9.	Average Annual turnover of Rs. 10 crores for the last three financial years preceding the date of submission of bid	Audited financial statements with all reports of last three financial years. In case of unaudited Financial Statements CA Certified Turnover Certificate must be enclosed for the past three years (Format in Annexure -6)

RFP for Supply and Installation of CCTV Cameras

10.	Literature or catalogue of the quoted product/item (if applicable)	Catalogue / Product Documentation
11.	Affidavit in original on Non-Judicial Stamp paper of Rs. 100/- duly attested by First Class Magistrate/Notary public.	(Format in Annexure -7)
12.	Performance Statement	(Format in Annexure -8)
13.	Net Worth: The net worth of the bidder for last three financial years, as on 31 st March 2022 or 31 st March 2023, should be Positive.	Chartered Accountant (CA) Certificate with CA's Registration Number/ Seal
14.	Manufacturer should have ISO 9001:2008 Certification for Quality Management System.	Valid Certificate
15.	Manufacturer should have ISO 14001:2004 Certification for Environmental Management System.	Valid Certificate
16.	OEMs should have registered Office in India.	Valid Documentary Proof
17.	OEMs should have Toll-Free number and local Service Center.	Valid Documentary Proof
18.	To ensure stability and credibility of OEMs, Company should not have any history of merger / acquisition in last 5 years.	Valid Documentary Proof
19.	The Offered Video Management Software Application should be ONVIF S, G, T & M Profile Compliant.	The Declaration of ONVIF S, G, T & M Profile shall be available on ONVIF Official Website www.onvif.org in the Conformant Devices.
20.	The Offered Video Management Software Application should have undergone Security Audit as per OWASP Guidelines & must Possess an Application Security Audit Certificate from CERT-IN Empaneled Auditors for the VMS as per the OWASP Guidelines to Mitigate Cyber Security Attacks. The Application must have already undergone Security Audit Certification/Auditing on or before the Bid Publishing Date.	A Security Audit Certificate must be Submitted as a Documentary Evidence/Proof.
21.	The VMS OEM should have an Experience in Law Enforcement Project within India with Min. Deployment of 300 Camera Licenses.	Purchase Order Copy & Satisfactory Completion Certificate from End User needs to be Submitted by the OEM to Substantiate the claim of the above Clause.

3. Scope of Work

3.1. Project Background:

The Hon'ble Supreme Court of India has directed the installation of CCTV cameras with audio recording in the courts in larger public interest and security.

The Proposed project is to be implemented across the State of Himachal Pradesh with IP based CCTV Camera (with Audio Recording) Installation in the High Court of Himachal Pradesh and District Judiciary of the State. Presently there are approx. 150 court rooms in the District Judiciary of Himachal Pradesh, similarly, there are approx. 63 locations in High Court. The Volume of Hardware / Software along with peripheral accessories etc may increase or decrease by 20% of order value based on actual requirement during the implementation of the project.

An oversight terminal for monitoring all the installed CCTV Cameras is to be set up only in the High Court of Himachal Pradesh at Shimla.

The Project aims to improve transparency and security of Court Rooms in the larger public interest.

The control center of the CCTV solution is proposed to be setup in the Hon'ble High Court of Himachal Pradesh. The IP based CCTV Cameras and Network Video Recorder (NVR) would be installed in each Court Complex of District Judiciary with local video recording for 90 days. However, Video Management Software (VMS) as well as CCTV Surveillance solution would be installed at central location and all the CCTV Cameras as well as NVRs would be controlled and operated from control center at Hon'ble High Court of Himachal Pradesh.

Key Stakeholders of the Project are as follows;

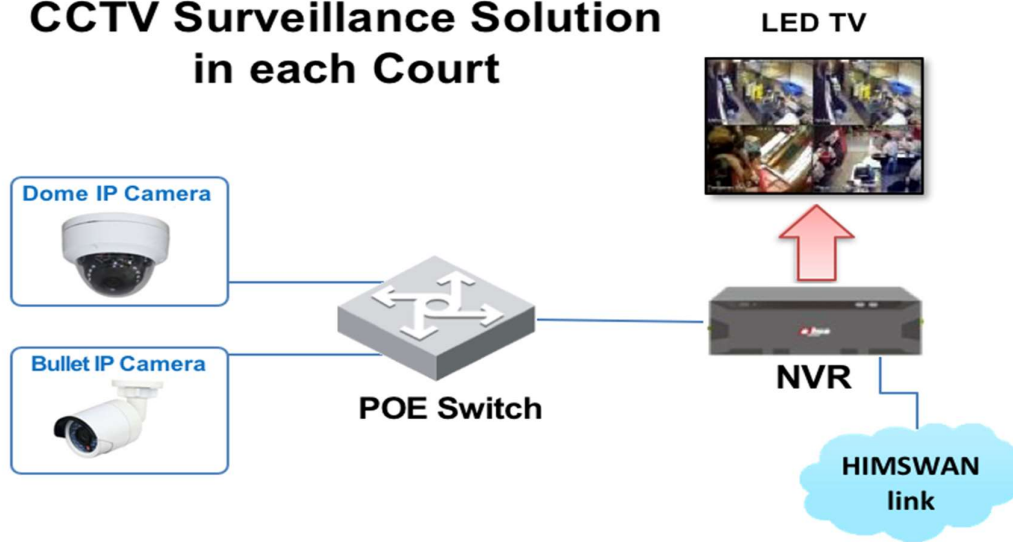
1. The Hon'ble High Court of Himachal Pradesh
2. Presiding Judges of the District Judiciary and Tribunals
3. Project Implementation Partner

The overall solution proposed for setting up of CCTV Surveillance system in each Subordinate Court - District Court (DC)/ Sub Division Court (SDC)/ Tehsil Level Court (TLC) Complex and control center at central location is as follows:

(A) District Court (DC)/ Sub Division Court (SDC)/ Tehsil Level Court (TLC) Complex

The overall architecture for CCTV Surveillance in District Court (DC)/ Sub Division Court (SDC)/ Tehsil Level Court (TLC) Complex would be as follows:

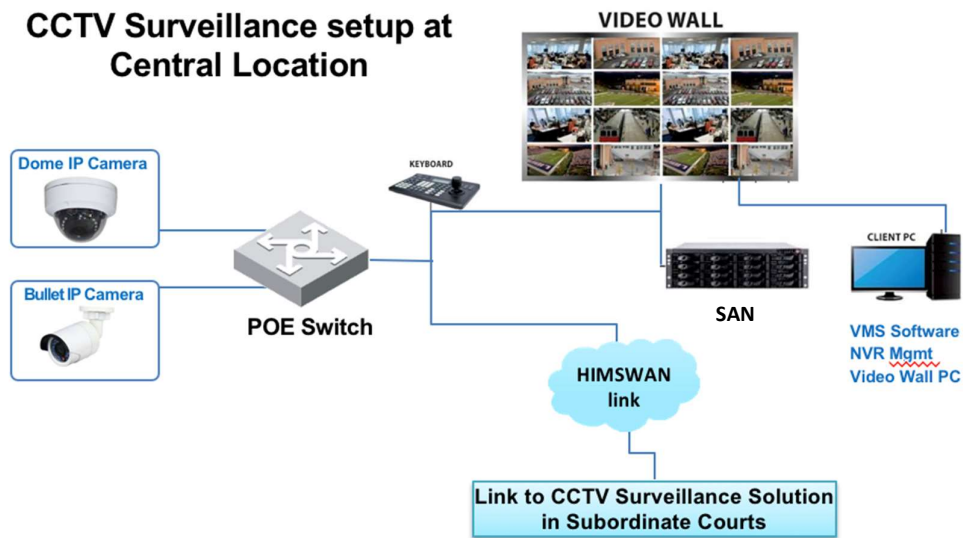
CCTV Surveillance Solution in each Court



- i. All Court Rooms in District Court (DC)/ Sub Division Court (SDC)/ Tehsil Level Court (TLC) will be having CCTV Cameras connected to Network Video Recorder (NVR) with Mouse locally in the Court premises. The NVR will be further connected over LAN to provide uplink feed on real time basis to Central location in High Court Shimla.
- ii. 8x 1 Gig Ports/ 24 x 1 Gig Ports POE Switch in each Court to connect CCTV Cameras, NVR, HIMSWAN Link etc. with provision to add more cameras in future.
- iii. 15U Modular Rack in each Court to install NVR, POE Switch, Patch Panel etc.
- iv. 42" Full HD LED TV in each Court to provide local view of the Cameras installed in the Court.
- v. LAN cabling work, electrical work including conduiting, connectorization, patch paneling and earthing to be done in each Court.
- vi. 1000 VA UPS to be installed in each Court to provide uninterrupted power supply.
- vii. 12 TB/ 24 TB Internal HDD for NVR to record data upgradable to 24 TB/ 48 TB.
- viii. **HIMSWAN** Link for connecting all District Judiciary to the Central Location.

(B) Central Location at High Court

The overall architecture for CCTV Surveillance at Central Location would be as follows:



- i. The Central location will be able to view live feed of all the cameras installed in various Courts and simultaneously record the feed in the Storage Area Network (SAN) installed in Central location.
- ii. SAN Storage with SAN Switch to record live feed of cameras at central location.
- iii. Video Wall (4 nos. of 42" Full HD LED TV) to provide live feed at Central Location of the CCTV Cameras installed in the Courts.
- iv. Video Management Software at Central location with client license and connection license to monitor and manage each and every NVR, CCTV Cameras installed in various Courts.
- v. Servers at Central location to install VMS
- vi. Workstations with client access license.
- vii. 24 x 1 Gig Ports POE Switch in Central Room to connect CCTV Cameras with provision to add more cameras in future.
- viii. CCTV Cameras at central location.
- ix. 42U Modular Rack to install NAS, POE Switch, Servers etc at Central location.
- x. LAN cabling work, electrical work including conduiting and earthing to be done at Central location.

- xi. **HIMSWAN link** for connecting all District Judiciary to the Central Location

3.2. Broad Scope of Work for CCTV Solution Provider

- ✓ The Bidder Supplying the turnkey solution shall be responsible for implementing and commissioning the complete solution and operating & maintaining the same for a period of five years. Bidders are encouraged to propose their solution on the understanding of the project.
- ✓ The Proposed project is to be implemented across the State of Himachal Pradesh with IP based CCTV Camera (with Audio Recording) Installation in the High Court of Himachal Pradesh and District Judiciary of the State. Presently there are approx. 150 court rooms in the District Judiciary of Himachal Pradesh, similarly, there are approx. 63 locations in High Court. The Volume of Hardware / Software along with peripheral accessories etc may increase or decrease by 20% of order value based on actual requirement during the implementation of the project.
- ✓ Terminal with the High Court of H.P. as per enclosed technical specifications.
- ✓ The control room/oversight terminal will be in the premises of High Court of H.P.
- ✓ CCTV is required to be installed inside the Court Rooms of the District Judiciary at specific locations. Cameras shall sense the objects even in low illumination.
- ✓ In case there is any digging work done during laying of cables of CCTV System and after completion, restoration of the same work shall be in the scope of bidder.
- ✓ It may be noted that if any work is required for completion of project, it will be deemed to be in the scope of the bidder whether it is specifically mentioned or not.
- ✓ The bidder should complete the entire job in all respect as per tender documents, Specifications, drawings, discussions as per site requirements to the satisfaction of High Court of H.P.
- ✓ The bidder shall give comprehensive hands on training to at least 04 personnel of High Court of H.P., on operation, preventive maintenance, recording and retrieval of the CCTV Recordings, operating system of the system on free of cost.
- ✓ Bidder shall continue to provide maintenance and support during the warranty period.
- ✓ Bidder shall resolve any complaints regarding the CCTV Surveillance System within 24 hours.
- ✓ No compensation shall be payable to the bidder for any damage caused by rains, lightening, wind, storm, floods, or other natural calamities during the execution of work. He shall make good all such damages at his own cost; and no claim on this account will be entertained.
- ✓ The bidder has to prepare and install the cameras, hardware/software /systems for all weather conditions.
- ✓ The cameras should be enough to work withstanding wind, rainfall, hailstorm and other inclement weather conditions.
- ✓ The work has to be carried out in neat and tidy manner to the satisfaction of the High Court of H.P. and all care has to be taken to ensure that no part of the building gets damaged during the execution of works. Materials used for carrying out the work shall be of standard quality as per technical specifications.

- ✓ If bidder fails to undertake the job satisfactorily or violates the terms conditions or not attending the work effectively, HPSEDC/High Court of H.P. has every right to cancel the contract and forfeit the security deposit without assigning any reasons whatsoever.
- ✓ A proper training for operation of CCTV cameras installed has to be given to all the concerned to enable them to operate the system, without any extra cost.
- ✓ The bidder shall have to remove all malba/debris if any from the site on the same day at his own cost and cleaning of the site has to be done on daily basis. No assistance for cleaning work shall be provided by High Court of H.P.
- ✓ The proposed CCTV surveillance system should have a recorded data backup capacity for at least 90 days.
- ✓ Product warranty minimum of five years from the date of installation.
- ✓ Operate and maintain the complete solution for 5 years both at High Court as well as District Judiciary.
- ✓ The Bidder will be required to provide onsite Manpower for the Operation & Maintenance of Project for a period of 5 years as specified in this document.
- ✓ Selected Bidder shall be responsible for Operations and Maintenance of the Equipment deployed under this project for the whole project duration. The bidder shall deploy sufficient manpower as defined in this RFP for field support in case of any issue at any location.

Broad expectations from the Bidder are:

- ✓ Camera provision and installation at sites/locations
- ✓ Video camera connectivity using HIMSWAN Link (Connectivity will be the sole responsibility of the bidder)
- ✓ Support the High Court of HP/ HPSEDC in analysis, and monitoring of the Video feeds from Cameras installed under this RFP.
- ✓ Conducting trainings for officials / users of video feeds from Cameras and on usage of solution components and prepare training material and conduct training work-shops etc.
- ✓ Documentation requirements: Documentation will be supplied and maintained by the bidder during different stages of the project. The documents have to be provided in English and MUST include at least 'User Documentation including user guide and procedures manuals for hardware and software', 'Software installation guide including the configuration of the database', 'Technical Documents', Trouble Shooting document, Installation Manual, Operational Procedures Manual, Acceptance Test Plan' and Other relevant technical documentation
- ✓ Provide post implementation Operations & Maintenance support for hardware procured.
- ✓ Provide post implementation support for software installed if any.
- ✓ Warranty terms compliance.

3.3. Manpower Requirements for Operations and Maintenance

The Successful Bidder shall provide the following Manpower with the given Qualifications during the entire Operations and Maintenance period of 5 years. The onsite Project Manager shall be the single point of contact for the High Court for daily project related operational issues in the High

Court as well as District Judiciary. The Project Manager will directly report to Nodal Officer Designated by the High Court.

S. No.	Designation	Number of Resources	Qualification	No of Years' Experience
1	Project Manager	1	BE/B Tech / MCA	Minimum 5 Years of Professional Experience as a Project Leader in Large e-Governance Projects
2	Field Staff	4	3 Years Diploma in Electronics & Communication / IT / Computer Science	Minimum 3 Years of Professional Experience in CCTV Maintenance and Installation in large Surveillance System / LAN, WAN Management.

- ✓ The bidder shall make appropriate arrangement / replacement of resources on holidays or leaves of deployed resources.
- ✓ 1 field staff to be located at Mandi, 1 field staff to be located at Kangra at Dharamshala; 2 field staffs to be located at Shimla.
- ✓ The Manpower shall sit at appropriate space provided by the High Court of HP
- ✓ All equipment such as Laptop, Tool Kits etc. shall be provided by the Bidder to the deployed Manpower.
- ✓ Travel Cost, Data Card Cost, Mobile Bill Cost and other office expense of deployed Manpower shall be the responsibility of Bidder.
- ✓ To sustain the project if additional human resources are required, the bidder shall be solely responsible to arrange for the same.

4. Instructions to Bidders

4.1. Pre-Bid Meeting/Conference

- ✓ HPSEDC shall hold a pre-bid meeting with the prospective bidders as per the date provided in the Bidding Details section above
- ✓ The Bidders will have to ensure that their queries for Pre-Bid meeting should reach as per below given format by post, facsimile or email (procurement@hpsedc.in) as per the date and time mentioned in the Bidding Details section

S. No.	RFP Document Reference(s) (Section & Page Numbers)	Content of RFP requiring Clarification(s)	Points of Clarification

- ✓ HPSEDC shall not be responsible for ensuring that the bidders’ queries have been received by them. Any requests for clarifications after the indicated date and time may not be entertained by HPSEDC.

4.2. Response to Pre-Bid Queries

- ✓ HPSEDC will endeavor to provide timely response to relevant queries pertaining to Project. However, HPSEDC makes no representation or warranty as to the completeness or accuracy of any response; nor does HPSEDC undertake to answer all the queries that have been posed by the bidders. The responses to the queries from all bidders will be distributed to all bidders who have raised the queries.
- ✓ At any time prior to the last date for receipt of bids, HPSEDC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by a corrigendum.
- ✓ The Corrigendum (if any) & clarifications to the queries from the bidders will be posted on the www.hptenders.gov.in of the pre-bid conference.
- ✓ Any such corrigendum shall be deemed to be incorporated into this RFP.
- ✓ In order to provide prospective Bidders reasonable time for taking the corrigendum into account, HPSEDC may, at its discretion, extend the last date for the receipt of Proposals.

4.3. Right to Terminate the Process

- ✓ HPSEDC may terminate the Tender process at any time and without assigning any reason. HPSEDC makes no commitments, express or implied, that this process will result in a business transaction with anyone.

- ✓ This Tender does not constitute an offer by HPSEDC. The bidder's participation in this process may result in HPSEDC selecting the bidder to engage towards providing CCTV Solution.
- ✓ HPSEDC reserves the right to modify and amend any of the stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

5. Service Level Agreement (SLAs) & Penalty

- ✓ The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to define the levels of service which shall be provided by the shortlisted Bidder to HPSEDC for the duration of this contract.
- ✓ The benefits of the SLA are as follows:
 - Solution performance optimization and obtaining desired results efficiently.
 - Standards and operational guidelines for HPSEDC / High Court of HP staff / Project Stake Holders and Bidders.
 - Greater productivity and better use of skills and experience.
 - Faster Redressal of defects in the system
- ✓ **Definitions**

For better understanding of Bidders, following terminologies are defined below: -

 - "Availability" shall mean the time for which the services and facilities are available for conducting operations from the equipment hosted at the sites/locations.
 - "Downtime" is the time the services and facilities are not available and excludes the scheduled outages planned in advance for different solution components.
 - "Helpdesk Support" shall mean the O&M Staff which shall handle Fault Reporting, Trouble Ticketing and related enquiries during the Warranty and contract period.
 - "Incident" refers to any event / abnormalities in the functioning of the CCTV, or other equipment deployed by the successful bidder that may lead to disruption in normal operations of overall solution.
 - "Service Window" shall mean the duration for which the facilities and services shall be available. Service window in this case shall be 24x7.
 - "Scheduled Down Time": Scheduled downtime means any time when the CCTV, or other equipment deployed by the successful bidder are unavailable because of urgent maintenance activities and any other scheduled maintenance or update activities that may or may not be periodic, and that may be notified to the Client at least 48 hrs in advance.
 - Resolution time is defined as the total time between receipt of the incidence (Helpdesk Call/ Receipt of alarm generated by management system) till the incidence been resolved. It includes response time i.e. time taken by support staff to acknowledge the call and reach the site to resolve call.

Note: Penalty for the delay in execution or default in performance SLA of the project shall be applicable, the reasons not attributable to the successful Bidder shall not attract penalty. However, the onus rests with the successful Bidder to justify the reasons for not imposing penalty for any delay or default.

- ✓ The SLA specifies the expected levels of service to be provided by the Bidder on 24x7 basis to the various stakeholders and users of project. This expected level is also called the Baseline. SLA also specifies the limits and metrics for lower performance, which will be

entailing a lower payment to the Bidder. It would also specify similar criteria for higher performance. The SLA also specifies the penalties for breach of the SLA metrics.

✓ **SLA Tracking**

This SLA section provides for minimum level of services required as per contractual obligations based on performance indicators and measurements thereof. The Bidder shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels. The services provided by the Bidder shall be reviewed by the Client as follows:

- Regularly check performance of the Bidder against this SLA.
- Discuss escalated problems, new issues and matters still outstanding for resolution.
- Review of statistics related to rectification of outstanding faults and agreed changes.
- Obtain suggestions for changes to improve the service levels.

✓ **SLA Compliance and Monitoring**

The Successful bidder will keep a System Maintenance Log which is a record of equipment failure including the nature of failure, date and time of complaint, when the machine was put back in to service and total down time. This record will be signed by the Bidder Service Engineer once the incident is resolved.

A signed copy of MIS report shall be forwarded by the Bidder to the respective officials at HPSEDC / The High Court of HP every Quarter before 10th in support to compliance regulation. After 10th a penalty of Rs.5000/- (Rupees Five Thousand only) will be levied per week. MIS should contain the following details:

- a. Monthly and quarterly availability of hardware and solution components.
- b. Total number of service calls recorded and resolved as per SLA with call details.
- c. Exception report indicating calls completed beyond SLA with calculation of non-performance deduction.
- d. Report on planned activities like server backups, software up-gradation etc.
- e. Preventive maintenance schedule for the quarter.

HPSEDC / The High Court of HP will check the MIS report with their System Maintenance Log before giving final acceptance.

5.1. Service Level for Operation and Maintenance phase along with the Penalty for default

✓ **Severity Level**

Severity and Criticality Matrix with Response and Resolution Service Levels for equipment is provided below:

Severity Level	Description of Components
1	Fault at Central Location at High Court (i.e. fault in VMS, SAN, UPS, Switches)
2	CCTV Camera not functional in High Court/ District Judiciary, Video feed from CCTV Camera is not available at the Central Location at High Court, CCTV Camera(s) recording not happening locally in District Judiciary
3	Fault in Access Control System, LAN, Earthing, Video Wall etc.

Following table defines the response time frames for each support tier based on problem severity. The time frames defined are inclusive of travelling time.

MTTA – Mean time to Act/Attend,

MTTR – Mean Time to Resolve

PBH – Peak Business Hours from 8:00 am to 7:00 pm on all days

ESH – Extended Service Hours from 7:00 pm to 8:00 am on all days

Description of Components	Service Window	Severity Level 1, 2 & 3	
		Target	Target
		MTTA	MTTR
Fault at severity level 1, 2 and 3	PBH	3 Hr	6 Hr
	ESH	4 Hrs	8 Hrs

The above matrix for response and resolution service levels will be subject to the following terms and conditions

- Firstly, all the indicators are measured/ calculated every month; thereafter consolidation will be done for each Quarter.
- The Successful bidder needs to resolve 99% of calls within defined time limits. This will be the criterion of Operational Performance. However, repeated calls (more than 4 in a quarter) of similar nature at the same location shall attract penalty for downtime.
- Breached timelines shall be treated as downtime.

In case of delay beyond the time limits prescribed in the clause above, penalties shall be imposed at the following rates (penalty to be imposed on quarterly basis):

Performance Level of Components covered under Severity Level 1:

Performance Level	Penalty as %
>=99%	No Penalty
>=97% to <99%	2 % of Quarterly Payment
>=94% to <96%	5 % of Quarterly Payment
>=90% to <94%	10 % of Quarterly Payment
>=89.5 to <90%	15 % of Quarterly Payment If the uptime goes below 89.5%, additional penalty of 0.5% Will be charged on for each 1% degradation in performance level.

Performance Level of Components covered under Severity Level 2:

Performance Level	Penalty as %
>=99%	No Penalty
>=97% to <99%	No Penalty
>=94% to <96%	2 % of Quarterly Payment
>=90% to <94%	5 % of Quarterly Payment
>=89.5 to <90%	10 % of Quarterly Payment If the uptime goes below 89.5%, additional penalty of 0.5% Will be charged on for each 1% degradation in performance level.

Performance Level of Components covered under Severity Level 3:

Performance Level	Penalty as %
>=99%	No Penalty
>=97% to <99%	No Penalty
>=94% to <96%	No Penalty
>=90% to <94%	2 % of Quarterly Payment
>=89.5 to <90%	5 % of Quarterly Payment If the uptime goes below 89.5%, additional penalty of 0.5% Will be charged on for each 1% degradation in performance level.

Note: The total penalty shall be capped at 20% of QGR.

✓ **Penalty Exclusion**

SLA penalty during operation and maintenance phase will not be applicable to Bidder under following conditions:

- Failure or malfunctioning of the equipment, systems not owned/ controlled by the Bidder or
- Circumstances or instances of Force Majeure; or
- Scheduled or preventive maintenance; or
- Alteration or implementations in the network

5.2. PENALTY for Delay in PROJECT IMPLEMENTATION

The delivery of project is scheduled within 12 weeks from the date of award. The warranty period will start from the date of commissioning of project. If the project final implementation is not completed as per the schedule due to lapses on the part of the Bidder, then Bidder will be liable for the penalty as under:

- Deduction of 0.5% of total value of the contract for first week of delay.
- Deduction of 0.75% of total value for continued second week of delay.
- Deduction of 1.0% of total value for continued third week of delay.
- If any milestone is delayed for four weeks, project contract will be terminated.

Note: In case of Penalty for the delay in execution or default in performance SLA of the project, the reasons not attributable to the successful Bidder shall not attract penalty. However, the onus rests with the successful Bidder to justify the reasons for not imposing penalty for any delay or default.

5.3. Penalty on Manpower

The bidder is required to provide fulltime dedicated manpower at Client Site with requisite qualification and experience as per the RFP. In case of default, following penalty will be imposed on the bidder.

S. No.	Item	% of presence of total manpower (with respect to total no of working days) with requisite qualification and experience	Penalty
1	Deployed Manpower as per this Agreement	100 %	Nil

2	Number of client-side dedicated Manpower deployed is less than tender requirement or not meeting qualification and/ or experience criteria	Less than 100%	<ul style="list-style-type: none"> · No payment would be released in the absence of onsite manpower · The payment would be deducted in proportion to the number of days of absence of manpower or in case manpower deployed lacks necessary qualification or experience. The above deduction shall be calculated on the basis of number of defaulting manpower out of total onsite manpower to be deployed under this Agreement.
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Note:

- a) The Client, while calculating payment, may impose penalties for both delay in deliverables as well as penalty on manpower
- b) The Client reserves the right to demand replacement of the manpower deployed by vendor, on account of non-performance or unprofessional conduct of the resource at Client site. Such replacement shall be carried out by the vendor within 4 weeks of written communication by the client, failing which the client shall invoke penalty considering that the manpower deployed by the bidder is less than 100%. The Client may also ask the Vendor to recall the resource where it is found that the presence of the resource at client site is unacceptable due to his/her unprofessional behavior.
- c) All above penalties shall be levied on the bidder for any failure on bidder's part in any of the agreed Timelines/ SLAs/ Terms & Condition. However, in any case, the total penalty value shall not be greater than 20% of the Quarterly Payment.

6. Payment Terms

- ✓ The payment against supply of stores shall be made within 30 days' subject to availability of fund from the date of receipt of the goods in good and acceptable conditions at the destination along with clear receipt of Invoice. However, no interest will be chargeable by the successful bidder, if the payment is delayed.
- ✓ The payment of the bill shall be made after deducting Government dues, if any.
- ✓ The payment of the bills shall be withheld in the following circumstances:
 - a) The goods are found sub-standard or in non-acceptable conditions:
 - b) Breach of condition of any terms and condition of the Agreement by the successful bidder.
 - ✓ Payment shall be made only after the acceptance of various deliverables by the evaluation committee. The Bidder will be paid project fee as a percentage of the contract value as per the Payment Schedule suggested below "Table A for Project Implementation Phase.

Table –A				
S. No	Project Milestone	Weeks	Payment	Remarks
1.	Award of the Work after signing of the Agreement	T	0%	
2.	First Instalment shall be paid after delivery of the Goods at the prescribed destinations alongwith satisfactory installation of equipments and execution of Performance Guarantee. Amount of 1 st instalment shall be regulated in such a manner that the payment will be 60% of the total order value.	T+ 18 weeks	60% of the total order value	A claim for first instalment shall be staked by the Supplier, when he has supplied adequate number of equipment. The first installment will be paid only after receipt of duly acknowledged delivery challans & invoice, as required by the Purchaser. 60% of the total order value
3.	OPEX			Remaining 40 % Shall be paid in equal quarterly installment along with Man Power Cost at the end of each Quarter over a Period of Five Years

- ✓ The payment for O&M shall be done on quarterly basis after audit of Invoices submitted for the quarter. Taxes (GST etc.) prevalent at the time of raising of invoice by the bidder shall be applicable for payment. The successful bidder will be penalized for absence on a pro rata basis using the rates submitted for manpower in the bid.
- ✓ The successful CCTV Solution Provider, upon issue of letter of acceptance/date of agreement shall also be required to furnish an irrevocable Performance Bank Guarantee (issued by a scheduled nationalized bank) equal to 5% of Gross bid Value valid for 5 years and 30 weeks (18 Weeks prior to commissioning and 5 years, 12 weeks after Go-Live) to the High Court of HP in the prescribed format, within 30 days of the issue of the letter of acceptance by the High Court of HP/ HPSEDC. In the event of failure on the part of the successful service provider to furnish the Performance Bank Guarantee within 30 days, the proposal shall be cancelled.

7. Bid Evaluation Process & Selection of PG Solution Provider

- ✓ The High Court of HP/ HPSEDC will constitute a Proposal Evaluation Committee to evaluate the responses of the bidders
- ✓ The Bidding process shall be online using e-procurement portal www.hptenders.gov.in. The Evaluation Committee(s) constituted shall evaluate the bids submitted online by the bidders for compliance.
- ✓ Bidders are requested to strictly submit the documents in sequence as per pre-Qualification Checklist.
- ✓ The Proposal Evaluation Committee constituted shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection
- ✓ The Client will first open Pre-Qualification cum Technical Bid in the presence of Bidders' representatives who choose to attend the Bid opening meeting on date mentioned above or on any other later day and time fixed or other enabling provisions in this behalf. The Bidder's representatives who are present shall sign a register evidencing their attendance. The proposal documentation furnished by the bidders shall be examined prima facie, to ensure that the proposal has been properly prepared, signed and accompanied by relevant documents criteria (cover letter, authorization/Power of Attorney in favour of bid signatory, other requisite details etc.) to substantiate the compliance with the criteria as explained above. The bidders are also required to give presentation on the solution proposed by them in response to this tender. Only the proposals qualifying the Preliminary Evaluation would be considered for further financial evaluation.
- ✓ HPSEDC shall consider the information furnished by bidder on technical requirements as sufficient and qualify the bidder for price bid opening. If, at any stage of pre-supply and post supply period, if it is found that any information furnished by the bidder is either false or hidden or fabricated, such bidder may be blacklisted by HPSEDC and prohibited from participating in any of future tenders for a period of 5 years. HPSEDC may at its sole discretion use services of a third party to verify the authenticity of the data furnished by bidders.
- ✓ The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee
- ✓ The Proposal Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their proposals
- ✓ The Proposal Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations
- ✓ The offer submitted by the Bidders should be valid for minimum period of 180 days from the date of submission of Bid
- ✓ HPSEDC will select the CCTV Solution Provider on the basis of Least-Cost-Method
- ✓ If more than one bidder is selected as L1, the decision taken by HPSEDC shall be on basis of additional services being offered to HPSEDC. In such cases the decision of HPSEDC shall be final and binding
- ✓ The acceptance of a tender, subject to contract, will be communicated in writing at the address supplied by the bidder in the bid document. Any change of address of the Bidder, should therefore be promptly notified to HPSEDC.
- ✓ Any type of price should not be disclosed in any documents part of the bid other than the online financial bid otherwise the bid will be rejected.

Note:

1. The Client reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for HPSEDC action.

2. Failure to agree with the Terms & Conditions of the RFP/Contract: Failure of the successful Bidder to agree with the Terms & Conditions of the RFP/Contract shall constitute sufficient grounds for the annulment of the award, in which event the Client may make the award to the next Best Value Bidder or call for new Bids.

8. Contract Period

- ✓ The duration of the contract is scheduled for a period of for 5 years and 18 weeks (i.e., 18 Weeks prior to the commissioning and 5 years of operation period) from the date of signing of the Agreement. However, duration of Agreement would be extended automatically depending on time taken for the commissioning of project so that 5 years of operation period shall necessarily be part of contract period. If HPSEDC decides the CCTV Solution Provider to carry on with the activities beyond the stated period, based upon the satisfactory performance of the CCTV Solution, the same may be extended by additional period as required at the same commercial terms based on concurrence of the CCTV Solution Provider. The communication for extension of the contract shall be done by the client before 3 months of the expiry of the contract.

9. General Terms and Conditions

The terms and conditions given in the RFP and subsequent corrigendum released by HPSEDC for Selection of agency for providing CCTV Services shall apply. These General Conditions shall apply to the extent that these are not superseded specific by provisions in other parts of this tender document. The main clauses are as follows:

9.1. One Proposal Per Bidder

Each bidder shall submit only one Proposal. The bidder who submits or participates in more than one Proposal will be disqualified.

9.2. Cost of Proposal

The bidder shall bear all costs associated with the preparation and submission of its Proposal, including site visits, and the Client will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the proposal process.

9.3. Amendment of RFP Document

At any time prior to the deadline for submission of Proposal, the Client may amend the RFP document by issuing suitable Addenda.

Any addenda thus issued shall be part of the RFP document, and shall be communicated in writing or by facsimile or by email to all bidders. It shall also be posted online at www.hptenders.gov.in. The bidder shall promptly acknowledge receipt of each Addendum by facsimile or by email to the RFP issuing authority. Failure to acknowledge receipt of each Addendum shall be interpreted as receipt of the Addendum by the bidder and no claim will be entertained or accepted in this regard.

To give bidders reasonable time in which to take an Addendum into account in preparing their Proposals, the Client shall extend, if necessary, the deadline for submission of Proposals.

No bid will be accepted after prescribed closing time for submission of the same. The delay will not be condoned for any reason whatsoever including postal/transit delay. However, if the last date of submission of tenders is declared as a holiday by the Government, the last date of submission of tenders will be extended to the next working day.

9.4. Limits on Promotion

The bidder will not make any reference to the department or this procurement or resulting contract in any literature, promotional material, brochures, sales presentation or the like without the express prior written consent of the authorized representative of the Client. The bidder shall not perform any kind of promotion, publicity or advertising etc. at the department field offices through any kinds of hoardings, banners or the like without the express prior written consent of the same.

9.5. Use & Release of Bidder Submissions

HPSEDC is not liable for any cost incurred by the bidder in the preparation and production of the Proposal, the preparation or execution of any benchmark demonstrations, simulation or training service or for any work performed prior to the execution of a formal contract. All materials submitted become the property of the Client and may be returned at its sole discretion. The content of each bidder's Proposal will be held in strict confidence during the evaluation process, and details of the Proposals will not be discussed outside the evaluation process.

9.6. Deadline for Submission of Proposals

Proposals must be submitted online by the bidders no later than the time and date stipulated in the RFP. The authorized authority may, in exceptional circumstances and at his discretion, extend the deadline for submission of Proposals by issuing an Addendum or by intimating all bidders who have been provided the Proposal Documents, in writing or by facsimile or by email in accordance with the RFP requirements. In this case, all rights and obligations of HPSEDC and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

9.7. Late Proposals

The e-procurement portal www.hptenders.gov.in will not accept any proposal past the deadline date & time. Physical or Manual submission of proposals shall not be entertained after the deadline.

9.8. Modification and withdrawal of bids

Before submission of any tender, the bidder must verify that they have submitted all relevant certificates/permissions/registration documents in proper format along with the bid. No intimation of missing documents and no documents will be accepted thereafter and the bids will be processed on the basis of available documents/certificates. If the requisite documents are not submitted or even if submitted are not in proper format, the bid is liable to be rejected.

HPSEDC may seek any clarification/explanation/documentary evidence related to offer at any stage from tenderers if required. However, any clarification/explanation or documentary evidence leads to implication on quoted price, it shall be considered only for technical evaluation but not for price evaluation.

The bidder may modify or withdraw its Bid after the Bid's submission prior to the deadline prescribed for submission of online Bids.

No Bid may be modified subsequent to the deadline for submission of Bids. No Bid may be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Bid Form.

9.9. Presence of Bidders

The bidders may send their authorized representative in the bid opening process. Information relating to the examination & clarification may be sought from the Bidder at the time of pre-qualification and technical evaluation. However, the client reserves the right to not share the

comparative analysis of proposals to the bidders until the award to the successful Bidder has been announced.

9.10. Taxes and Duties

Bidders shall be entirely responsible for payment of all taxes.

9.11. Correction of Errors

Bidders are advised to exercise greatest care in entering the pricing figures in the Bill of Quote (BoQ). No excuse that mistakes have been made or requests for prices to be corrected will be entertained after the quotations are opened online. All corrections, if any, should be digitally signed by the person signing the bid form before submission, failing which the figures for such items may not be considered.

Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.

9.12. Contacting Department

Any effort by bidders to influence the officials in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder's Proposal. Queries, requests if any regarding the bid should be forwarded to the RFP issuing authority at the address/e-mail-id specified in this RFP.

9.13. Disqualification

The bid is liable to be disqualified if:

- Not submitted in accordance with this RFP.
- During validity of the bid or its extended period, if any, the bidder increases his quoted prices without the consent of the Client to change the bid quote.
- The bidder puts his own conditions with the bid.
- Bid received in incomplete form or not accompanied by EMD and Tender document fee.
- Manual Bid received instead of online submission, unless authorized by the Client.
- Bid not accompanied by all requisite documents.
- Bidder fails to enter into a contract within 30 working days of the date of notice of the award of tender or within such extended period, as may be specified by an authorized representative.

9.14. Performance Bank Guarantee

- ✓ The successful bidder shall at its own expense deposit with HPSEDC, within Thirty (30) working days of the date of notice of award of the contract or prior to signing of the contract whichever is earlier, an unconditional and irrevocable Performance Bank Guarantee (PBG) from a Nationalized bank payable on demand, for the due performance and fulfillment of the contract by the bidder. Format of PBG is given in this document.
- ✓ The performance guarantee shall be denominated in the currency of the Contract and shall be by bank guarantee.

- ✓ This Performance Bank Guarantee will be for an amount of 5% of Gross Bid Value. All charges whatsoever such as premium; commission etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.
- ✓ The performance bank guarantee shall be valid till the end of six months after the period of end of contract.
- ✓ The Performance Bank Guarantee may be discharged / returned by the client upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.
- ✓ In the event of the bidder being unable to service the contract for whatever reason, the Client would invoke the PBG. The Client shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default. This will be in addition to other penal actions that can be initiated by HPSEDC.
- ✓ HPSEDC shall also be entitled to make recoveries from the Bidder bills, PBG or any other payment due, in case of any error/ omission on bidder's part.

9.15. Liquidated Damages

- ✓ In the event Bidder fails to provide the Services in accordance with the Service Standard, Bidder shall be liable for penalty as per the terms and conditions of the agreement signed between the successful bidder and The High Court of HP/ HPSEDC.
- ✓ HPSEDC is entitled to withhold (deduct) from the payment due or the Performance Bank Guarantee the liquidated damages that have become due as per the terms and conditions of the agreement signed between the successful bidder and The High Court of HP.

9.16. Termination of Contract

9.16.1. Termination for default

HPSEDC, without prejudice to any other remedy for breach of Contract or non-compliance with service levels, by written notice of default sent to the Bidder, may terminate the Contract fully or in part:

- ✓ If the selected Bidder fails to deliver any or all Contracted services as per service standards specified in the Contract or
- ✓ If the selected Bidder fails to perform any other obligation(s) under the Contract as per the contract timeline and for the period of contract, or
- ✓ If the Bidder/ selected Bidder has engaged in corrupt or fraudulent practices in competing for or in executing the Contract

In the event HPSEDC terminates the Contract in whole or in part, it may procure, upon such terms and in such manner, as it deems appropriate, services similar to those undelivered, and the selected Bidder shall be liable to HPSEDC for any excess costs for such similar services. However, the Bidder may continue performance of the Contract to the extent not terminated. HPSEDC would not be liable to pay any damages to the selected Bidder in cases comprising Termination for default.

9.16.2. Termination for insolvency

HPSEDC may at any time terminate the Contract by giving written notice to the selected Bidder, if the selected Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the selected Bidder, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to HPSEDC.

9.16.3. Termination for Convenience

HPSEDC, by written notice sent to the successful bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination be for its convenience. In case of termination for convenience, HPSEDC would pay to the bidder cost of services provided till the date of the termination. The PBG in such a case would be refunded to the successful bidder.

9.16.4. Force Majeure

The successful Bidder shall not be liable for forfeiture of its Performance bank guarantee, Liquidated Damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this clause, "Force Majeure" means an event beyond the control of the Bidder and not involving the successful Bidder fault or negligence, and not foreseeable. Such events may include, but are not restricted to, acts of the Government in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the successful Bidder shall promptly notify the authorized representative of Client in writing of such condition and the cause thereof. Unless otherwise directed by the authorized representative of the Client in writing, the Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

9.17. Exit Management

1. Purpose

- ✓ This clause sets out the provisions that will apply on expiry or termination of the contract.
- ✓ In the case of termination of contract due to illegality, HPSEDC will decide at that time whether, and if so during what period, the provisions of this clause shall apply.
- ✓ The Parties shall ensure that their respective associated entities, authorized representative of or its nominated agencies and the successful bidder, carry out their respective obligations set out in this Exit Management Clause.

2. Cooperation and Provision of Information

During the exit management period:

- ✓ The bidder will allow The High Court of HP/ HPSEDC or its nominated agencies access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable it to assess the existing services being delivered;
- ✓ Promptly on reasonable request by The High Court of HP/ HPSEDC or its nominated agencies, the bidder shall provide access to and copies of all information held or controlled by it, which have been prepared or maintained in accordance with the contract. The High Court of HP/ HPSEDC or its nominated agencies shall be entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The vendor shall permit The High Court of HP/ HPSEDC or its nominated agencies and/or any Replacement vendor to have reasonable access to its employees and facilities as reasonably required to understand the methods of delivery of the services employed by the vendor and to assist appropriate knowledge transfer.

3. Confidential Information, Security and Data

- A. The vendor will promptly on the commencement of the exit management period supply to The High Court of HP/ HPSEDC or its nominated agencies the following:
 - a) Information relating to the current services rendered and customer satisfaction surveys and performance data relating to the performance in relation to the services; and
 - b) Documentation relating to Intellectual Property Rights; and
 - c) High Court of HP data and confidential information; and
 - d) All current and updated departmental data as is reasonably required for purposes of The High Court of HP or its nominated agencies transitioning the services to its replacement vendor in a readily available format; and
 - e) All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable The High Court of HP/ HPSEDC or its nominated agencies, or its Replacement vendor to carry out due diligence in order to transition the provision of the Services to The High Court of HP/ HPSEDC or its nominated agencies, or its Replacement vendor (as the case may be).
- B. Before the expiry of the exit management period, the Vendor shall deliver to The High Court of HP/ HPSEDC or its nominated agencies all new or up-dated materials from the categories set out in point (A) above, and shall not retain any copies thereof, except that the Vendor shall be permitted to retain one copy of such materials for archival purposes only.

- C. Before the expiry of the exit management period, unless otherwise provided under the contract, The High Court of HP/ HPSEDC or its nominated agencies shall deliver to the Vendor all forms of Vendor confidential information which is in the possession or control of The High Court of HP/ HPSEDC or its nominated agencies or its users.

4. Employees

- ✓ Promptly on reasonable request at any time during the exit management period, the CCTV Solution Provider shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to The High Court of HP/ HPSEDC or its nominated agencies a list of all employees (with job titles) of the bidder dedicated to providing the services at the commencement of the exit management period;
- ✓ Where any national, regional law or regulation relating to the mandatory or automatic transfer of the contracts of employment from the bidder to The High Court of HP/ HPSEDC or its nominees, or a Replacement Vendor ("Transfer Regulation") applies to any or all of the employees of the bidder, then the Parties shall comply with their respective obligations under such Transfer Regulations.
- ✓ To the extent that any Transfer Regulation does not apply to any employee of the bidder, The High Court of HP/ HPSEDC or its nominated agencies, or its Replacement Vendor may make an offer of employment or contract for services to such employee of the bidder and the Vendor shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the department or its nominated agencies or any Replacement Vendor.

5. Transfer of certain agreements

On request by The High Court of HP/ HPSEDC or its nominated agencies, the bidder shall effect such assignments, transfers, innovations, licenses and sub-licenses as The High Court of HP/ HPSEDC may require in favor of The High Court of HP/ HPSEDC or its nominated agencies, or its Replacement Vendor in relation to any equipment lease, maintenance or service provision agreement between bidder and third party lesser, vendors, or Vendor, and which are related to the services and reasonably necessary for the carrying out of replacement services.

6. Right of Access to Premises

- ✓ At any time during the exit management period, where Assets are located at the bidder's premises in relations to this project, the bidder will be obliged to give reasonable rights of

access to (or, in the case of Assets located on a third party's premises, procure reasonable rights of access to) The High Court of HP/ HPSEDC or its nominated agencies, and/or any Replacement Vendor.

- ✓ The bidder shall also give The High Court of HP or its nominated agencies, or any Replacement Vendor right of reasonable access to the bidder's premises and shall procure The High Court of HP/ HPSEDC or its nominated agencies and any Replacement Vendor rights of access to relevant third party premises during the exit management period and for such period of time following termination or expiry of the contract as is reasonably necessary to migrate the services to The High Court of HP/ HPSEDC or its nominated agencies, or a Replacement Vendor.

7. General Obligations of the bidder

- ✓ The bidder shall provide all such information as may reasonably be necessary to effect a seamless handover as practicable in the circumstances to The High Court of HP/ HPSEDC or its nominated agencies or its replacement Vendor and which the bidder has in its possession or control at any time during the exit management period.
- ✓ For the purposes of this Clause, anything in the possession or control of any Vendor or associated entity is deemed to be in the possession or control of the bidder.
- ✓ The bidder shall commit adequate resources to comply with its obligations under this Exit Management Clause.

8. Exit Management Plan

- ✓ The bidder shall provide to The High Court of HP/ HPSEDC or its nominated agencies with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the contract as a whole and in relation to the Project Implementation, the Operation and Management SLA and scope of work.
 - i. A detailed program of the transfer process that could be used in conjunction with a Replacement Vendor including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer; and
 - ii. Plans for communication with such of the bidder's staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on The High Court of HP's operations as a result of undertaking the transfer; and

- iii. If applicable, proposed arrangements for the segregation of the bidder's networks from the networks employed by The High Court of HP/ HPSEDC or its nominated agencies and identification of specific security tasks necessary at termination; and
 - iv. Plans for provision of contingent support to The High Court of HP/ HPSEDC or its nominated agencies, and Replacement Vendor for a reasonable period after transfer for the purposes of providing service for replacing the Services.
- ✓ The bidder shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
 - ✓ Each Exit Management Plan shall be presented by the bidder to and approved by The High Court of HP or its nominated agencies.
 - ✓ In the event of termination or expiry of the contract each Party shall comply with the Exit Management Plan.
 - ✓ During the exit management period, the bidder shall use its best efforts to deliver the services.
 - ✓ Payments during the Exit Management period shall be made in accordance with the Terms of Payment Clause.
 - ✓ This Exit Management plan shall be furnished in writing to The High Court of HP/ HPSEDC or its nominated agencies within 90 days from the Effective Date of the contract.

9.18. Confidentiality

- A. Neither party will disclose to any third party without the prior written consent of the other party any confidential information which is received from the other party for the purposes of providing or receiving Services which if disclosed in tangible form is market confidential or if disclosed otherwise is confirmed in writing as being confidential or if disclosed in tangible form or otherwise, is manifestly confidential. Each party will take measures to project the confidential information of the other party that, in the aggregate are no less protective than those measures it uses to protect the confidentiality of its own comparable confidential information, and in any event, not less than a reasonable degree of protection. Both parties agree that any confidential information received from the other party shall only be used for the purposes of providing or receiving Services under this Contract or any other contract between the parties

These restrictions will not apply to any information which:

- I. is or becomes generally available to the public other than as a result of a breach of an obligation under this Clause; or
- II. is acquired from a third party who owes no obligation of confidential in respect of the information; or

- III. is or has been independently developed by this recipient or was known to it prior to the receipt.
- B. Notwithstanding Clause (A) mentioned above, either party will be entitled to disclose confidential information of the other (1) to its respective insurers or legal advisors, or (2) to a third party to the extent that this is required by any or where there is a legal right. Duty or requirement to disclose, provided that in the case of sub- Clause (ii) (and without branching any legal or regulatory requirement) where reasonably practicable not less than 2 business days' notice in writing is first given to the other party.
- C. Without prejudice to the foregoing provision of this Clause above bidder may cite the performance of the services to clients and projective clients as an indication of its experience.
- D. The bidder shall not, without State prior written consent, disclose the commercial terms of this work order to any person other than a person employed by the bidder in the performance of the work order.
- E. The clause on Confidentiality shall be valid for a further period of one year from the date of expiry or termination of the assignment, whichever is earlier.

9.19. Responsibility for safe custody and integrity of data

- ✓ The bidder shall not, without prior written consent from The High Court of HP, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of The High Court of HP in connection therewith, to any person other than a person employed by the bidder in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.
- ✓ The bidder shall not, without prior written consent of The High Court of HP, make use of any document or information made available for the project, except for purposes of performing the Contract.
- ✓ All project related documents issued by The High Court of HP, other than the Contract itself, shall remain the property of The High Court of HP and shall be returned (in all copies) to The High Court of HP on completion of the bidder's performance under the Contract if so required by The High Court of HP/ HPSEDC.

9.20. Contract amendment

- ✓ No variation in or modification of the terms of the Contract shall be made except by written amendment signed by both the parties.

9.21. Resolution of disputes

- A. In case of any dispute, the decision of High Court of H.P. Shimla will be final and honored.

9.22. Insurance Requirement

- ✓ The bidder shall maintain standard forms of comprehensive insurance including liability insurance, system and facility insurance and any other insurance for the personnel, assets, data, software, etc. and submit the list of all the insured items to The High Court of HP/ HPSEDC prior to the start of operations. Bidder shall take and keep effective all the insurances during the period of the Contract.

9.23. Insurance and Packaging of Equipment in Transit

- ✓ All items and equipment provided by the Bidder as mentioned in the RFP, should be packaged and labeled as per industry standards in order to protect the equipment from physical damage during shipping and transit. The delivery should be accompanied by a packaging slip.
- ✓ Appropriate Insurance to cover the equipment for the transit period and till the time of its acceptance by The Client at the respective sites, is to be taken by the Bidder. At the discretion of The Client there will be an Acceptance Test conducted by the client after the installation of complete equipment. The Bidder shall assist in conducting the Acceptance test and shall ensure the presence of its personnel at the site for the test.
- ✓ It shall be the sole responsibility of the Bidder to bear the cost of damage/replacement of any equipment during the period of project implementation and Post implementation support or till such time, the equipment is accepted by The Client. Bidder shall ensure that all damaged equipment are replaced within 2 business days from breakdown or as defined in SLA's.
- ✓ Bidder shall ensure that all equipment provided are of Brand-new quality and are supplied with their original and complete printed documentation. They should also provide a certificate from the Original Equipment Manufacturer certifying that the "end-of-life" of the equipment is at least more than 18 months from the date of supply and "end-of-support" not during the warranty period.

Note: The products (Hardware & Software) which are HOMOLOGATED in India or abroad should only be proposed. Certification sought is the Third Party (Government/Government approved Lab) assurance of the Quality, Technical Accuracy

and Reliability of products (Hardware & Software) proposed by the Bidder. General self-assessing marks confirming to basic parameters of safety, health, environment, such as CE, which neither is Quality mark or Safety mark, moreover also represents China Exports, are not acceptable.

9.24. Delivery and Documents

- ✓ The Bidder shall submit all the deliverables on due date as per the delivery schedule agreed with the client. The Bidder shall not without The Client's prior written consent disclose the Contract, drawings, specifications, plan, pattern, samples to any person other than an entity employed by The Client, for the performance of the Contract.
- ✓ Bidder shall also provide other necessary documentation like manuals, license, certificates, Brochures as part of the deliverables. After the installation of various equipments at the site, Bidder shall submit the Installation report which shall clearly mention the Names, Serial Number, Make, and Model of equipment along with the date of installation to the Client.
- ✓ Bidder shall provide all necessary support whenever requested by The High Court of HP/ HPSEDC during the period of project implementation and maintenance. Qualified professionals should immediately rectify any sort of defects in the system.

9.25. Progress of the Project

- ✓ The Bidder would be required to intimate the progress of the project to The Client at a frequency and manner prescribed in consultation with the client after the award of Contract.

9.26. Notices

- ✓ Any notice or other document, which may be given by either Party under the agreement, shall be given in writing and signed by the duly authorized representatives of the Parties. The notice or document may be given either in person or by pre-paid recorded delivery post or by facsimile transmission or by e-mail. A notice shall be effective from the date when delivered, tendered or affixed on notice board whichever is earlier.
- ✓ In relation to a notice given under the Agreement, any such notice or other document shall be addressed to the other Party's principal or registered office address.
- ✓ Immediately on signing of Agreement, successful bidder will appoint its duly authorized representative/ nodal person who will be taking/ sending notices on behalf of the bidder

and will be responsible for deliverables, communication with The High Court of HP HPSEDC. Bidder will confirm in writing the name of nodal person to The High Court of HP/ HPSEDC along with his/ her official email address. Similarly, The High Court of HP will appoint nodal officer and inform the bidder.

9.27. Interpretation of Clauses

- ✓ In case of any ambiguity in the interpretation of any of the clauses in the bid document, The High Court of HP's interpretation of the clauses shall be final and binding on all parties.

9.28. Third Party Claims

- ✓ The CCTV Solution Provider (the "Indemnifying Party") shall undertake to indemnify The High Court of HP (the "Indemnified Party") from and against all losses, claims or damages including losses, claims or damages on account of bodily injury, death or damage to tangible property.
- ✓ The CCTV Solution Provider shall indemnify The High Court of HP against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in reference to this project in India.

9.29. Limitation of Liability

- ✓ Either party will accept liability without limit, for death or personal injury caused to the either party by its negligence or the negligence of its employees acting in the course of their employment;
 - a. Any other liability which by law either party cannot exclude.
 - b. This does not in any way confer greater rights than what either party would otherwise have at law
- ✓ The RFP does not contemplate any consequential, indirect loss, profit and claim for tort or similar damages of any form to be paid by the Bidder to The Client or any other organizations.
- ✓ Notwithstanding anything to the contrary contained in this RFP, in no event will the Bidder be liable to The Client, whether a claim be in tort, contract or otherwise; for any amount in excess of 100% of the total professional fees payable for the Project.
- ✓ No action regardless of form, arising out of this RFP may be brought by either party be for more than one year after the cause of action has accrued.
- ✓ The aggregate liability of the CCTV Solution Provider to The High Court of HP in contract or tort or under statute or otherwise, for any loss or damage suffered by The High Court of

HP arising from or in connection with the Services, however the loss or damage is caused, including CCTV Solution Provider's negligence but not fraud or other deliberate breach of duty, shall be limited to the amount of loss or damage suffered by The High Court of HP.

9.30. Applicable Law

- ✓ The contract shall be governed by the laws and procedures established by Govt. of India/ State of Himachal Pradesh within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing.

9.31. Standards of Performance

- ✓ The Bidder shall perform the services and carry out their obligations under the Contract with due diligence, efficiency and economy in accordance with generally accepted professional standards and practices. The Bidder shall always act in respect of any matter relating to this contract as faithful advisor to The Client. The Bidder shall always support and safeguard the legitimate interests of The Client, in any dealings with the third party. The Bidder shall abide by all the provisions/Acts/Rules etc. prevalent in the Country & State and conform to the standards laid down in RFP in totality.

9.32. Disqualification

- ✓ The Client in its sole discretion and at any time during the processing of responses may disqualify any Bidder from the bid process, if the Bidder:
 - I. Submitted the proposal after the schedule date and time does not meet the eligibility criteria as mentioned in this RFP.
 - II. Has made misleading or false representations in the forms, statements and attachments submitted in the proof of eligibility requirements
 - III. Is found to have record of poor performance such as abandoning works, not properly completing contract, inordinately delaying completion, being involved in litigation or financial failures
 - IV. Submitted proposals which is not accompanied by required documents
 - V. Failed to provide clarifications related there to, when sought
 - VI. Submitted more than one proposal. The Client can disqualify all such proposals or retain one of them in its own sole discretion. EMD will be forfeited for the disqualified bids on account of multiple bid submission and The Client may blacklist the bidder/parent company for a specified time period from all future projects.
 - VII. Bidder who are found to canvass, influence or attempt to influence in any manner the qualification of selection process, including without limitation, by offering

bribes or other illegal gratification shall be disqualified from the process at any stage.

9.33. Award of Contract

- ✓ The final contract must stipulate that the Implementation will satisfy the requirements as stated in the RFP. On acceptance of Proposal for awarding the contract, The Client will notify the successful bidder in writing that their proposal has been accepted. The Client and successful bidder will work out the Contract Agreement at the time of signing of Contract. After signing of the Contract Agreement, no variation in or modification of the term of the Contract shall be made except by written amendment signed by the parties.
- ✓ The Client reserves the right to award the contract, based on initial offers received or otherwise, without discussion and without conducting any further negotiations. Further, the selected Bidder may not reassign any award made as the result of this RFP, without prior written consent from The Client.

9.34. Notification of Award

- ✓ The Bidder whose Bid has been accepted shall be notified of the award by The Client prior to the expiration of the period of validity of the proposal, by registered letter or by fax. This letter (hereinafter the “Letter of Acceptance”) shall state the sum that The Client shall pay the Bidder in consideration of the execution, completion and maintenance of the work as prescribed by the Contract (hereinafter the “Contract Cost”) in accordance with Payment Terms. The Bidder shall acknowledge in writing, the receipt of the Letter of Acceptance and shall send his acceptance to enter into the Contract within 7 (Seven) days from the receipt of the Letter of Acceptance.

9.35. Signing of Contract

- ✓ Pursuant to the Bidder acknowledging the Letter of Acceptance, the Bidder and The Client shall promptly and in no event later than 15 (fifteen) days from the date of acknowledgement of the Letter of Acceptance, sign the Contract. This shall be subject to the furnishing of the Performance Bank Guarantee as stated in this RFP. The Client shall have the right and authority to negotiate certain terms with the successful Bidder before signing of the Contract. The signing of the Contract shall amount to award of the Contract and the Bidder shall initiate the execution of the work as specified in the Contract.

9.36. Annulment of Award

- ✓ Failure of the successful Bidder to comply with pre-qualification criteria, evaluation criteria and other terms and conditions set out in the RFP Document shall constitute sufficient ground for the annulment of the award of Contract and forfeiture of the EMD, in which event The Client may make the award to the next lowest evaluated Bidder or call for new bids.

9.37. Warranty

- ✓ The bid proposal shall be inclusive of a “Comprehensive onsite Warranty period of five years from the date of Go Live/User Acceptance. The Bidder shall maintain systems and peripherals supplied and installed under this RFP in accordance with the provisions laid down in the clauses below during the warranty period.

- ✓ **Scope and Services Covered under Warranty:**

The Bidder shall provide the following services under the warranty to keep the systems and peripherals in good working order.

- Unscheduled on call corrective and remedial maintenance service to set right the malfunctioning of the system. This includes replacement of unserviceable parts. The parts replaced will either be new parts or equivalent in performance to new parts. In the case of a part, the defective part removed from the system will become the property of the Client.
- Operating System (OS) and software application Support: The supply is comprehensive inclusive of OS and software application support on all the systems supplied and installed under this contract. Any problem related with OS and software maintenance, reloading of OS with all device drivers, OS upgrade, device drivers, application version upgrade, System configuration and network configuration (if required) shall be attended & rectified by the Bidder. All required device drivers shall be provided by the Bidder. The Bidder shall also keep a copy of all device drivers.
- Scheduled preventive maintenance (PM) shall be carried out once in Three Months for all systems and peripherals.

- The Bidder should submit the call sheets/ PM reports to respective officers at The High Court of HP. In case the Bidder fails to submit PM reports, penalty as prescribed in this RFP will be levied for the period so delayed. Preventive maintenance can be clubbed with corrective maintenance.

9.38. IT SECURITY

- ✓ All the Hardware & Software applications proposed in the bid document by bidders should comply with industry standards of Hardware and Software security both. Security of data/video transmission and the content of communication over hybrid fiber optic network of Telecom Operator is a key issue. Data and reports generated during project execution and normal day to day operations should be as per industry accepted norms with no violation of privacy loss.
- ✓ For any consequences resulting out of the use of unlicensed software or insecure applications as per industry norms, Bidder shall be liable to cover all the charges and monetary damages to the concerned parties.

9.39. Latest instructions for bidders:

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:

-

- a. An entity incorporated, established or registered in such a country; or
- b. A subsidiary of an entity incorporated, established or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or

- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The beneficial owner for the purpose of (III) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

The Bidder has to provide following declarations (duly signed and stamped):

Declaration 1 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered."

Declaration 2 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

Declaration 3 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached]"

Note: Interested bidder may refer to Office Memorandum (F. No. 6/18/2019-PPD) dated 23.07.2020 of Department of Expenditure, Ministry of Finance, Govt. of India for further details and all the requirement will be in accordance with this memorandum.

10. Annexure 1: Pre-Qualification Checklist

The bidder should attach following checklist for compliance with important criterion along with the Pre-Qualification cum Technical bid to be submitted:

S. No.	Item	Complied (Yes/ No)	Remarks
1.	All pages of bid are numbered and Manually/Digitally signed by authorized signatory		
2.	Proof (Board resolution/ Power of attorney) stating that the person signing the bid is an authorized representative of the bidder		
3.	Online payment of EMD and Tender Document cost		
4.	Copy of the Certificate of Incorporation and Certificate of Commencement of Business		
5.	Chartered Accountant's certificate in original/self-attested, showing year wise production and sales for quoted product for last three years. (Format given in Annexure -3)		
6.	Authority letter/ Dealer or distributor certificate/ Wholesaler agreement/ agency certificate issued by Original Manufacturer. (Format given in Annexure - 4) {If bidder is not Manufacturer}		
7.	Undertaking that the bidder has not been blacklisted/ debarred by any State Government or Central Government Department/ Organization		
8.	Industrial License /I.S.I. Certificate/Factory Inspectors License/ Registration Certificate/ Udyog Aadhar acknowledgement of the Bidder or Principal manufacturer (whichever is applicable).		
9.	Supplier information form (Format in Annexure - 5)		
10.	Audited financial statements with all reports of last three financial years. In case of unaudited Financial Statements CA Certified Turnover Certificate must be enclosed for the past three years (Format in Annexure -6)		
11.	Catalogue / Product Documentation		

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12.	Copy of PAN and GST		
13.	Affidavit in original on Non-Judicial Stamp paper of Rs. 100/- duly attested by First Class Magistrate/Notary public. (Format in Annexure -7)		
14.	Performance Statement (Format in Annexure -8)		
15.	Proof of Net Worth: Chartered Accountant (CA) Certificate		
16.	Technical specifications for all items included in the Financial bid on Bidder's Letter Head		
17.	Filled in Compliance Sheet for Technical Specifications		
18.	Valid Documentary proof of Manufacturers ISO 9001:2008 Certification for Quality Management System.		
19.	Valid Documentary proof of Manufacturers ISO 14001:2004 Certification for Environmental Management System.		
20.	The surveillance and networking OEMs that are being referred here, are the OEMs for the hardware of CCTV Surveillance Cameras and network switches components and not the software components.		
21.	Valid Documentary proof of OEMs registered Office in India.		
22.	Valid Documentary proof of OEMs Toll-Free number and local Service Center.		
23.	Valid Documentary proof of OEMs, Company not having any history of merger / acquisition in last 5 years.		
24.	Valid Documentary proof of Switches OEM being in Gartner Wired & Wireless Access LAN Magic Quadrant from last 3 years		

Note: The bidder should ensure that all the required documents, as mentioned in this RFP document, are submitted along with the Bid and in the prescribed format and the documents should be ordered as listed above. Non-submission of the required documents or submission of the documents in a different format/ contents may lead to the rejections of the Bid submitted by the bidder.

11. Annexure 2: Financial Bid Format

Following tables shall be used for submission of financial bid from the bidders:

- The rates quoted by the bidder shall be all inclusive (For example: out of pocket expenses, Installation & commissioning expenses, traveling, boarding, lodging charges and other operating cost etc)
- No cost other than quoted below shall be claimed and paid separately.
- Quantity shown or proposed here in, is tentative requirement, it may increase or decrease. The rates should not vary with the quantum of requirement. The bidder must supply the quantity as ordered by High Court of Himachal Pradesh, during the period of contract.

(A) District Judiciary - District Court (DC)/ Sub Division Court (SDC)/ Tehsil Level Court (TIC) Complexes:

(Details given in Annexure — 10)

S. No.	Item	Minimum Qty (1)	Unit Cost in INR (2)	GST in INR (3)	Total Unit Cost in INR (Inclusive of all applicable taxes) (4=2+3)	Total Cost with 5 years' warranty (in INR) (=1*4)
1.	NVR with 4 SATA Slots with 12 TB HDD and 8 channels	34				
2.	NVR with 8 SATA Slots with 24 TB HDD and 16 channels	16				
3.	Dome IP Camera (Inside the	150				
4.	Bullet IP Camera (outside the Court Room)	150				
5.	POE Switch (8 Ports)	53				
6.	POE Switch (24 Ports)	6				
7.	15U Modular Rack	49				
8.	42" Full HD LED	49				
9.	LAN cabling with conduit, patch panel, LAN termination, connections etc.	11920 m				
10.	UPS (1 KVA) with 4 hours backup	49				
11.	Earthing, if required (copper plate, earth pit, GI pipe, concrete chamber 1x1 ft, 40 m copper wire, PVC pipe, 60 kg charcoal, 4 kg	49 Locations				

12.	Electrical Cabling (If Required) - 15-amp points, 3 x 4 wire 30 m, pvc conduit from mains to UPS, extension of electrical points to Rack, Video display etc)	49 Locations				
13.	Any Other item(...)					
Total Cost (A)						

(B) Central Location at High Court of Himachal Pradesh:

Sr. No.	Item	Qty (1)	Unit Cost in INR (2)	GST in INR	Total Unit Cost in INR (inclusive of all Taxes) (4=2+3)	Total Cost with 5 years warranty in INR (=1*4)
1.	Integrated Network Video Recorder to capture feed of all cameras	1				
2.	Integrated Video Management Software with client license and connection license	1				
3.	SAN storage 500 TB Usable after raid 6 Config to store CCTV cameras feed from Day 1	3				
4.	SAN Switch to connect storage with Servers	1				
5.	Network controlled keyboard	1				
6.	Dome IP Camera (in the Central Room)	1				
7.	Bullet IP Camera (outside the Central Room)	1				
8.	POE Switch (24 Ports)	1				
9.	42U Modular Rack to install NVR, NAS, POE Switch, Servers etc	1				
10.	Video Wall, Controller & Management Software - 6 Cubes (3x2)	1				
11.	Server with FC Ports to install VMS, Video Wall, NVR Management	6				
12.	Workstations with 21" LED with Client Access License	3				

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13.	LAN cabling with conduit, patch panel, LAN termination, connecterisation etc. (approx.)	240 m				
15.	UPS (10KVA) with 6 hours backup	1				
16.	DGSET (15 KVA) in synchronization with UPS	1				
17.	Earthing	2				
18.	Electrical Cabling	1				
19.	Access Control System	1				
20.	CCTV Camera (Dome / Bullet as per actual site requirement)	63				
21.	NVR with 32 channels	2				
22.	42-inch LED Screen	1				
23.	Any Other Item (...)					
Total Cost (B)						

(C) Manpower for the Operation & Maintenance of Project:

Sr. No.	Item	Qty. (1)	Unit Cost per month in INR (2)	GST in INR (3)	Total unit Price per Month in INR (Inclusive all applicable taxes) (4=2+3)	Total Price Per Month In INR (5=1*4)	Total Cost for 5 Years (in INR) (=5*60 months)
1.	Project Manager	1					
2.	Field Staff	4					
Total Cost (C)							

(D) Total Cost of the CCTV Solution:

Sr. No.	Item	Total Cost (in INR)
1.	District Judiciary (A)	
2.	Central Location at High Court (B)	
3.	Manpower (C)	
Total Cost (Gross Bid Value)		

* All quoted prices should be inclusive of all taxes and duties prevailing on the date of proposal submission.

NOTE:

The above format is indicative only, as the Financial Bid will be submitted online in excel template in the e-procurement portal www.hptenders.gov.in.

The rates shall be fixed for the duration the Project. No variation in the rates shall be allowed. The rates are being sought under the rate contract the order quantity shall be decided by The High Court of HP from time to time and appropriate work order issued at that time. The Bidder shall meet the time line as defined in this RFP for installation and Commissioning of equipment for each individual work order

The Manpower Shall be deployed as soon as the first work order under this rate contract is released by The High Court of HP, payment shall be made quarterly as per the deployed Man Power after deduction of Penalty if any.

12. Annexure 3: Format for Manufacturing Experience Certificate for the last Three Financial Years

Manufacturing Experience Certificate for last three years for quoted product

(For manufacturer only)

(on the letter head of Chartered Accountant)

The Production and Sales of _____ (Name of quoted product) of M/s for the last three years are given below and certified that the statement is true and correct.

Sr. No.	Year	Production (Qty)	Sales (Qty)
1.			
2.			
3.			

Date:

Place:

Name & Signature of Chartered Accountant
along with seal

13. Annexure 4: Format For Authorization Letter for Authorized Distributors or Dealers

(Format of Authorization Letter for Authorized Distributor or Dealer or wholesaler or Stockiest issued by Original manufacturer)

(to be submitted IN ORIGINAL and Self Attested as well as scanned copy as part of Online Bid)

I/We _____ hereby declare that M/s _____ is our authorized distributor or Dealer for our products in India/Himachal Pradesh/region/ area from date _____ and they are authorized to quote and follow up on our behalf and the said agreement is valid in force as on date.

I/We undertake to supply the items for which the quotations of following items are submitted by M/s _____ on our behalf in respect of Tender Enquiry No. _____

<u>Sr. No.</u>	<u>Item No.</u>	<u>Name of Item</u>

I/we have read all the terms and conditions of the tender enquiry and the same are irrevocably binding upon us till the expiry of the Contract signed & executed on our behalf

I/We shall notify the High Court of H.P., Shimla immediately if there is any change in the agreement between M/s _____ and me /us regarding authorized distributorship of our products and further undertake to supply the items quoted by the distributor on my /our behalf at the quoted in the tender enquiry in case of such a change of agreement.

This authority is applicable only for Tender Enquiry No. _____

Date:

Signature of Authorized Signatory

14. Annexure 5: Supplier Information Form

1. Name of Organization: _____
2. Permanent Account Number (PAN): _____
3. Registered Address: _____
4. Correspondence Address: _____
5. Deal in kind of Services/Products: _____
6. GST Registration No: _____
7. Bank A/C Details:
 - Name of Bank: _____
 - Bank A/C No: _____
 - Branch & Add: _____
 - IFSC code: _____
 - MICR code: _____
8. Contact Details
 - Contact Person: _____
 - Telephone No.: _____
 - Mobile No.: _____
 - E-mail ID: _____
9. Name of sister concern _____
or any Interdependent Entity (If Any) _____

(Signature of Authorized Person)

Date:

(Name: _____
Designation _____)

15. Annexure 6: Annual Turnover Statement

ANNUAL TURN OVER STATEMENT

(CA Certified)

The Annual Turnover of M/s_____ for the past three years and concurrent commitment for the current financial year are given below and certified that the statement is true and correct.

Sr. No.	Year	Turnover
1.		
2.		
3.		
Total		Rs.
Average turnover per annum		Rs.

Date:

Place:

Name & Signature of Chartered Accountant along with seal

16. Annexure 7: Format of Affidavit

AFFIDAVIT
(TO BE SUBMITTED PHYSICALLY in addition to scanned copy in Online Bid)
(to be submitted in ORIGINAL on Non Judicial Stamp Paper of Rs. 100/- duly attested by First Class Magistrate/Notary Public)

I/We _____ Age _____ years
residing at _____ in capacity of _____
_____ M/s _____ hereby solemnly affirm that

1. All General Instructions, General Terms and Conditions, as well as Special Terms and Conditions laid down on all the pages of the Tender Form, have been read carefully and understood properly by me which are completely acceptable to me and I agree to abide by the same.
2. I/We have submitted following Certificates /Documents for T.E. as required as per General Terms & Conditions as well as Special Terms & Conditions of the tender.
3. All the Certificates /permissions /Documents /permits /affidavits are valid and current as on date and have not been withdrawn/cancelled by the issuing authority.
4. It is clearly and distinctly understood by me that the tender is liable to be rejected if on scrutiny at any time, any of the required Certificates/Permissions/Documents / Permits Affidavits is /are found to be invalid /wrong/Incorrect/misleading /fabricated/expired or having any defect.
5. I/we further undertake to produce on demand the original certificate/ permission /documents/permits for verification at any stage during the processing of the tender as well as at any time asked to produce.
6. I/We also understand that failure to produce the documents in “Prescribed Proforma” (wherever applicable) as well as failure to give requisite information in the prescribed Proforma may result in to rejection of the tender.
7. My/Our firm has not been banned /debarred/blacklisted at least for three years (excluding the current financial year) by any Government Department /State Government/Government of India/Board /Corporation/Government Financial institution in context to purchase procedure through tender.
8. I/We confirm that I/We have meticulously filled in, checked and verified the enclosed documents /certificates/ permission/permits/affidavits/information etc. from every aspect and the same are enclosed in order (i.e. in chronology) in which they are supposed to be enclosed. Page numbers are given on each submitted document. Important information in each document in Highlighted with the help of marker pen as required.

9. The above certificates /documents are enclosed separately and not on the Proforma printed from tender document.
10. I/We say and submit that the permanent Account Number (PAN) given by the Income Tax Department is _____ which is issued on the nature of _____ (kindly mention here either the name of the Proprietor in case of Proprietor firm or name of the tendering firm, whichever is applicable).
11. I/We understand that giving wrong information on oath amounts to forgery and perjury and I/We am/are aware of the consequences thereof in case any information provided by us are found to be false or incorrect, you have the right to reject our bid at any stage including forfeiture of our EMD/PBG/cancel the award of contract, in this event. This office reserves the right to take legal action on me/us.
12. I/We have physically signed and stamped all the above documents along with copy of tender documents (Page No. to _____)
13. I/We hereby confirm that all our quoted items meet or exceed the requirement and are absolutely compliment with specification mentioned in the bid document.
14. My/or company has not filed any writ petition, court matter and there is no court matter filed by State Government and its Board Corporation, is pending against our company.
15. I/We hereby commit that we have paid all outstanding amount of dues /taxes/cess/charges/fees with interest and penalty.
16. In case of breach of any tender terms and conditions or deviation from bid specifications other than already specified as mentioned above, the decision of Tender Committee for disqualification will be accepted by us.
17. Whatever stated above is true and correct to the best of my knowledge and belief.

Date:

Place:

Stamp & Sign of the Bidder

(Signature and seal of the Notary)

17. Annexure 8: Format for Performance Statement

Performa for Performance Statement
(For the Last 3 Financial Years)

Name of Firm _____

Sr. No.	Name of Product	Year	Quantity Supplied	Value	Name and full address of the purchaser
1.					
2.					

Date:

Sign & Seal of Bidder

18. Annexure 9: BOQ

Part (A)

List of CCTV Cameras already installed in High Court Premises

Sr. No.	Location	No. of CCTV Cameras installed
1.	Main Entry Gate of High Court, meant for vehicular traffic	One CCTV camera with night vision facility
2.	Main Entry Gate of High Court, meant for pedestrians	One CCTV camera with night vision facility
3.	Near Main Gate of New Administrative Block	One CCTV Camera
4.	Hon`ble Judges Entry Path to New Auditorium of High Court	One CCTV Camera
5.	Hon`ble Judges Porch	One CCTV Camera
6.	PWD Tunnel	One CCTV Camera
7.	Near the High Court Canteen	One CCTV Camera with night vision facility
8.	3rd, 4th, 5th, 6th & 7th Floor of Main High Court Building	Two CCTV cameras at each floor (Total 10 CCTV Cameras)
9.	Ground Floor and First Floor of Main High Court Building	One CCTV Camera in each floor (Total 2 CCTV Cameras)
10.	Main Entrance of Main High Court Building	Two CCTV Cameras
11.	2nd Floor of Main High Court Building	Three CCTV Cameras
12.	Near Goomti	One CCTV Camera
	Total	25 CCTV Cameras

Proposed Locations for the installation of CCTV Cameras

Sr. No.	Location	No. of CCTV Cameras required
1.	Entrances of High Court Gymnasium	Two CCTV Cameras
2.	Underground Judges Parking	Two CCTV Cameras
3.	Entrances of Old High Court Building	Three CCTV Cameras
4.	Judges/Judicial Officers Parking	Two CCTV Cameras
5.	High Court Employees Parking	Two CCTV Cameras
6.	Path towards the Lift in AG Office	One CCTV Camera
7.	Path towards Lawyers Chambers	One CCTV Camera
8.	Gate/path to Hotel Holiday Home	One CCTV Camera
9.	Main Entry Gate of High Court	One CCTV Camera
10.	Ground Floor of Main High Court Building	One CCTV Camera
11.	Record Room in Main High Court Building	One CCTV Camera
12.	Backside of Main High Court Building	One CCTV Camera
	Total	18 CCTV Cameras

Proposed Locations for the installation of CCTV Cameras in New Administrative Block

Sr. No.	Location	No. of CCTV Cameras required
1.	Entry point to the Lift from the Judicial Branch	One CCTV Camera
2.	Entry and exit from the Judicial Branch at Main Gate	Two CCTV Cameras

3.	One facing the filing Counter and another facing the Copying agency, in the Ground Floor	Two CCTV Cameras
4.	One facing Writ Section and one facing the FAO/RSA Section	Two CCTV Cameras
5.	Basement-I One on the left side and one on the right side (entry points)	Two CCTV Cameras
6.	Basement-II One on the entry point and one on the passage leading outside the building	Two CCTV Cameras
7.	One in inspection room, one outside the inspection room in the corner, one facing RFA and another facing Stat Section on the first floor. One facing Criminal Section and other facing Civil Suit Section	Five CCTV Cameras
8.	One at entry point to the Auditorium from the Judicial Branch, Two at entry and exit to the New Auditorium from the Road side	Three CCTV Cameras
Total		20 CCTV Cameras

Part (B)

Material

S. No.	Item	Item Description	Qty.*
1	CAMERA	5MP Day & Night Outdoor Varifocal (2.8-12mm) Bullet Network Camera	150
2	CAMERA	5MP Day & Night Outdoor Varifocal (2.8-12mm) Dome Network Camera	150
3	VMS	Video Management System Base License to support IP camera, encoders, NVRs and DVRs supported upto 500 Devices	1
		Video Management System Cameras License for Video Recording /Monitoring, Analytics(Crowd detection, Image Enhancement for fog ,Stopped Vehicle Detection for time longer ,Object counting or people/vehicle counting analytics) Event Notification & Offline Analytics for post- event analysis, live video on iOS and Android phones or devices ,alerts on Mobile phones, Remote Administration over internet, Ability to make a Phone call/IVR on any alert or alarm Streaming Without any additional Equipment, Option to do recordings on NAS, iSCSi, DAS, local or network drive.	365
		Video Management System with Cameras License Failover	300
4	CORE SWITCH	24 10/100/1000Base-T with 4 10G SFP+ L3 Managed Switch	2
5	Distribution POE Switch	24 10/100/1000Base-T with 4 10G SFP+ and 2 10G Base-T L2 + Managed Switch	2
6	Transceiver	1G SFP Module same make as of Switches.	4
7	Edge Switch	Industrial Grade POE Switch 8 Port	53
8	SAN	Video Recording Storage – SAN(As per Specs)500TB Usable after raid 5 Config, Enterprise SAS HDD Min 7200RPM or higher, 16GB per controller upgradable to 32GB Cache per controller , power supply should be hot-swappable with N+1 design.	3

9	SAN Switch	As per Specs	1
10	Server	Video Management Server with 18” Screen, Keyboard and Mouse	6
11	Workstation	i7 Client Machine	3
12	Screen	42-inch Screen	49
13	UPS	10 KVA UPS System (with 720 min backup)	1
	UPS	1 KVA UPS System (with 240 min backup)	49
14	Core Rack	42U Enclosure Frame-800X1000-STEEL with all Accessories and Rack Grouting Kit, Key Board Shelf, Fixed Shelf. CRCA steel, CNC programmed, Conforms to DIN 41494 OR equivalent ISO Standards, Welded Frame Front Door : Lockable Toughened Glass Door, Rear Door : Metal Vented Dual Door, Basic Frame : Steel, Equipment Mounting : DIN Standard 10mm Sq. Slots / Direct M6 Tap Mounting Angle : 19” Mounting angles made of formed steel Standard Finish : Powder Coated Top and Bottom Cover : Welded to Frame, Vented and Field Cable entry exit cut outs Mounting Option : Castor wheels (Front 2 wheels with Break and rear without break) with Levellers Standard Colour : Black or Grey Static Load : 500+ KGs	2
15	Edge Rack	IP 55 Outdoor Pole Rack 9U X 550mm W X 500 mm D ;Construction of Material- 1.2/1.5mm Thick CRCA sheet; Each rack includes: A very compact design, welded structure with front accessible; The side panels are integrated type & welded with canopy & bottom cover; Rigid frame that can be fixed to the pole; Front Door with Filter, Louver & Lock;90CFM, 230V AC Fan - 2 Nos in front door; Self-adhesive thermal foam from inside; Door Hinges - 2 Nos; Cable Glands at bottom side for cable entry;19" Angles 6U - 2 Nos for equipment mounting; Gasket (As per IP55 Standard); Pole Mounting Brackets at rear side- 2 Nos; Hood For Air Inlet at front side; Powder Coated Surface;1U Cantilever Tray 250mmDepth;3 Socket PDU 5Amp - 1 No; Finish : Light Grey -RAL 7035-powder coated	150
16	UTP and Components	CAT6 UTP 23AWG Solid Outdoor Double Jacket UV protected Cable :305M	30
17		Patch Panel Cat 6 UTP Keystone Type- 8 Port-Fully Loaded	150
18		Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully Loaded	4
19		CAT6 UTP 24AWG PATCH CORD:1M, Snagless	350
20		CAT6 UTP 24AWG PATCH CORD:3M, Snagless	50
21		CAT 6 Modular Plugs Pack of 100	6
22	OFC and Components	OFC 6F	12160
23		LIU 12 PORT Rack Mount- Loaded (SC) SM (payment would be made to successful bidder as per actual quantity.)	98
24		PATCH CORD LC-SC SM DUPLEX LENGTH- 2m.	49
25		PIGTAIL SC SM SIMPLEX LENGTH- 1m	49
26	Access Control System for Central Control Room	To be installed at HP High Court for restricting access to video monitoring area	1
27	Video Wall, Controller &	Video Wall, Controller and Management Software should be supplied and installed at High Court for Monitoring and Controlling at various courts	6 Cubes (3x2)

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	Management Software		
28	NVR	NVR with 4 SATA Slots with 12 TB HDD and 8 channels	34
29	NVR	NVR with 8 SATA Slots with 24 TB HDD and 16 channels	16
30	NVR	NVR with 8 SATA Slots with 48 TB HDD and 32 channels	2
31	Camera	Cameras for HP High Court	63

Installation

S.No.	PRODUCT DESCRIPTION	Qty.*
1	Rigid/Flexible PVC Conduit Pipe	200 mtrs
2	PLB HDPE Pipe 40mm OD	100 mtrs
3	Fibre Laying	430 mtrs
4	Splicing	86 pts
5	UTP Laying	12160 mtrs
6	Route Marker for OFC	86
7	Digging	100 mtrs
9	Rack Installation	49 locations
10	Installation & commissioning (Cameras, VMS, Servers, Switches)	49 locations

* Payment will be made on as per actual quantity supplied

19. Annexure 10: Technical Specifications

Note: All the CCTV cameras should be ONVIF compliant to maintain the open/heterogeneous environment. The ONVIF compliance should be of latest standards i.e. Profile S, G & Q

All Camera must comply with Cybersecurity measures and shall provide on board Cybersecurity feature inbuilt in firmware to protect the hardware against cyber threats such as Brute force, snooping etc and having signed firmware with secure boot. The Camera OEM should have full membership on onvif website.

The Equipment supplied should not be manufactured or use any component from countries sharing a land border with India.

5 MP Day & Night Outdoor Varifocal Bullet Network Camera

S.No.	Description	Specifications	Compliance (Yes/No)
1	Image Sensor	1/2.7" 5MP Progressive scan CMOS	
2	Min. Illumination	0.005 Lux@F1.5	
3	Effective Pixels	2592(H) x 1944(V)	
4	Angle of View	Horizontal: 99°-26° Vertical: 72° -20° Diagonal: 133° -33°	
5	Body Type	Bullet	
6	Shutter Speed	Auto/Manual, 1/3~1/100000s	
7	White Balance	Auto/natural/street lamp/outdoor/manual/regional custom	
8	Lens	2.7-13.5mm Motorized or better	
9	Lens Type	Motorized	
10	Gain Control(AGC)	Auto/Manual	
11	Video Compression	H.265+/H.265/H.264+/H.264	
12	Back Light Compensation	BLC/HLC,WDR(120dB)	
13	Video Streaming	Main stream (2592 × 1944@1~20 fps) (2688 × 1520@1~25/30 fps) Sub stream(704 × 576@1~25/30 fps)	
14	Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)	
15	Privacy Masking	Up to 3 Areas or more	
16	Motion Detection	Off / On (4 Zone, Rectangle)	

17	ICR	ICR Switch	
18	ROI	Yes (4 areas)	
19	Audio Input / Output	1 In / 1 Out	
20	Audio Compression	G.711A/G.711Mu/G.726/AAC	
21	Alarm Input / Output	1 In / 1 Out	
22	Wide Dynamic Range	Upto 120dB or better	
23	Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP, ONVIF (Profile S/Profile G); CGI; P2P	
24	Smart Detection	Tripwire; intrusion	
25	Starlight	Yes	
26	IVS	Yes	
27	Ethernet	RJ-45 (10/100M Base-T)	
28	IR	IR Range of 60 Mtr.	
29	Micro SD	FTP; Micro SD Card (support max. 256 GB); NAS	
30	Humidity	Less than 95% RH	
31	Power Supply	DC12V, PoE	
32	Operating Temperature	-30°C~+60°C , Less than 95%RH	
33	Weather Proof Rating	IP67 & IK10(Optional)	
34	Certificates	CE,FCC, UL/ BIS	

5 MP Day & Night Outdoor Varifocal Dome Network Camera

S.No.	Description	Specifications	DS-2CD3756G2T-1ZS
1	Image Sensor	1/2.7" 5MP Progressive scan CMOS	Yes
2	Min. Illumination	0.02Lux/F1.6(Color,1/3s,30IRE) 0.2Lux/F1.6(Color,1/30s,30IRE) 0Lux/F2.0(IR on)	Yes
3	Effective Pixels	2,560×1,920	Yes
4	Angle of View	H:95°~27°, V:70°~20°	Yes (Submitted as clarification)
5	Body Type	Dome	Yes
6	Shutter Speed	Auto/Manual, 1/3~1/100000s	Yes
7	White Balance	Auto/natural/street lamp/outdoor/manual	Yes
8	Lens	2.7-13.5mm Motorized or better	Yes

9	Lens Type	Motorized	Yes
10	Gain Control (AGC)	Auto/Manual	Yes (Submitted as clarification)
11	Video Compression	H.265+/H.265/H.264+/H.264	Yes
12	Back Light Compensation	BLC, HLC, WDR (120dB)	Yes
13	Video Streaming	Main stream (2592 × 1944@1~20 fps) (2688 × 1520@1~25/30 fps) Sub stream (704 × 576@1~25/30 fps)	Yes
14	Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)	Yes (Submitted as clarification)
15	Digital Zoom	16 X	Yes (Submitted as clarification)
16	Privacy Masking	3 Areas or more	Yes (Submitted as clarification)
17	Motion Detection	Off / On (4 Zone, Rectangle)	Yes (Submitted as clarification)
18	ICR	ICR Switch	Yes (Submitted as clarification)
19	ROI	Yes (4 areas)	Yes
20	Audio Input / Output	1 In / 1 Out	Yes
21	Audio Compression	G.711A/G.711Mu/G.726/AAC	Yes
22	Alarm Input / Output	1 In / 1 Out	Yes
23	Wide Dynamic Range	Upto 120dB or better	Yes
24	Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP, ONVIF (Profile S/Profile G); CGI; P2P	Yes (Submitted as clarification)
25	Smart Detection	Tripwire; intrusion	Yes (Submitted as clarification)
26	Starlight	Yes	Yes (Submitted as clarification)

27	IVS	Yes	Yes (Submitted as clarification)
28	Ethernet	RJ-45 (10/100M Base-T)	Yes
29	IR	IR Range of 30 Mtr.	Yes
30	Micro SD	Micro SD Card 256 GB	Yes
31	Humidity	Less than 95% RH	Yes
32	Power Supply	DC12V, PoE	Yes
33	Operating Temperature	-30°C~+60°C, Less than 95%RH	Yes
34	Weather Proof Rating	IP67 & IK10	Yes
35	Certificates	CE, FCC, UL/BIS	Yes
36	MIC	either external MIC or built in MIC, is required	

Video Management System

Description	Specifications	Compliance (Yes/No)
Central & Integrated Video Management and Analytic software:	Centralized Video monitoring of Unlimited cameras spread across multiple sites ,towns and places	
	Should support Integration with external devices like Access Control, ANPR and PIDS(Perimeter Intrusion Detection System), Radars.	
	Alerts in central station according to rules.- Email, SMS, Phone call, Sound alert, Pop up	
	Video Analytics alerts: Camera Tampering, Intrusion , Missing object, Perimeter Violation, Object Left, Crowd Detection, Stopped Vehicle, Illegal Parking	
	Situation Management by defining appropriate actions and acknowledgement for alerts	
	Connection to Multiple monitors for Live(Fixed and PTZ), Alarm, Maps screens	
	Emap showing status of all cameras, devices and Alarms- Connects and	
	Disconnect Status reports.	
Recordings	Video Management Specifications	
	Should record H.264, MPEG4 or MJPEG in at minimum 25 fps at minimum Full HD (1080p) resolution.	
	Supports RTP over UDP, RTP over TCP and http streaming	
	Should support multiple brand IP camera and encoders.	
	Should support dual streaming and recording at different qualities of videos.	
	Option to do recordings on SAN, NAS, iSCSi, DAS, local or network drive. Defining different drive for each individual camera.	
Should have ability record audio along with video in same recording file.		

	Option to define multiple recording paths	
	Pre-buffer and Post buffer recordings up to 10 minutes.	
	Calculate storage size based on number of cameras, days and drives available in the system	
	Option to record at low frame(I-frame) and high frame rate on Motion	
	Export recordings in mp4, avi and asf formats. Must be playable in any OS Windows, Linux/Unix or Apple Mac.	
	Export recording possible in client and remote PC also with proper authentication.	
	Option for Window-Pop up, Email, Sound alarm, Phone call on recording or video loss.	
	Storage and Bandwidth calculation: Recoding size estimation for each hard disk attached to the server. Option to check disk size of individual camera.	
	Image Enhancement on recorded videos. The image enhancement should be able enhance videos of fog, rain and low light conditions.	
	The option of email and Video Pop up on Low disk space event. The system should alert user on low disk space event.	
	Automatic archiving after set number of days and automatic recording deletion after disk full.	
	Encryption (56 to 256 bit) of recordings while export for safe evidence	
Live, Playback & PTZ	Live View possible for minimum 64 cameras simultaneously on 1 screen or multiple monitors using software video wall.	
	Dual Streaming and Automatic Switching from Low to High Quality on Full screen mode.	
	Option to change Live View directly from cameras or from VMS server using RTSP and HTTP options	
	It should support live view and Playback from minimum 10 clients- Both local and remote.	
	Customized camera views based on :	
	User input number of cameras.	
	User chosen shape and size.	
	View sequencing with user driven time interval.	
	Digital Zoom :	
	1. Both complete live picture and Zoomed picture should be visible simultaneously while zooming. 2. Should be available On Live and Playback Videos. 3. Zoom available on snapshots too.	
PTZ	PTZ option available through mouse and joystick	
	Gaming joystick as well as PTZ joystick options available	
	On screen PTZ control with Click and Zoom facility	
	PTZ presets and tours setting	
	Live view and Playback available at the same time with Playback window on top of live view window.	

	Instant Playbacks available as window pop up on click of an event from Event Screen.	
	Image Enhancement Analytic available in Playback. Option to sharpen the video image through scrollbar.	
	Playback Navigation Tree View with Recording server, camera list, year/months list and the date wise play list.	
	Playlist with files listed for each date and or time. User can click on any file to play recording.	
	E-map client should show icon blink and voice alert of the event. Should be able to take snapshots from Google Map if connected to internet	
	Two-way audio communication between camera and VMS. Option to send/broadcast Audio to multiple cameras	
	Time-lapse/Video Summarization Feature in Playback: Ability to show selected video in short time. For example 24 hour video in 5 minutes.	
	Encryption: Ability to encrypt video while exporting. Options of 56 bit, 128 bit and 256 bit encryption	
	360 Fisheye degree camera support	
	360 degree fisheye camera Support: Ability to unwrap 360 degree cameras in the software.	
	Quad, Double and Click View options	
	Option of saving and retrieving Presets for fisheye cameras.	
Mobile Surveillance & Remote Viewing	Ability to view live video on iOS and Android phones or devices with or without installing proprietary Apps.	
	Ability to receive alerts on Mobile phones without SMS using XMPP/MQTT technology.	
	PTZ Control on Mobile App and Remote Locations	
	VMS and Mobile App support for multiple sites spread across WAN to be controlled and viewed from central location.	
	Remote Administration over internet.	
	Ability to make a Phone call/IVR on any alert or alarm	
Streaming	Option for RTSP, HTTP , RTSP over HTTP streaming or both simultaneously at individual camera level.	
	Option to Transcode to lower bit rate stream at recording server level. The lower bit rate can be done for any individual camera and options of resolution at 640x480, 320x240 and Frame rate at 20 fps,10 fps. This helps in viewing video at low bandwidth.	
	Authentication parameters (username, password) for streaming to remote clients.	
Alarms, Video Analytics, Event Notification & Offline Analytics for	VMS and Video Analytics should be from same vendor. Following video analytics should be supported based on licensing:	
	Perimeter Trip wire. Crossing Virtual line	
	Object counting or people/vehicle counting analytics	
	Stopped Vehicle Detection for time longer than set duration on no parking zones on the stations	

post- event analysis.	Crowd detection	
	Intrusion detection on schedules time intervals	
	Abandoned Baggage Detection	
	Missing object Detection. Multiple objects selection	
	Image Enhancement for fog and low light conditions	
	Camera Tampering Detection for camera blurred video or blocking	
Features required in Analytics	Analytics can be applied in Full HD-1080P resolution, H.264 compression and 25fps.	
	Both offline and Real time analytics options available.	
	Option to Email, Phone call/IVR and Push Alarm any Event to mobile phones. Push method should be without SMS	
	Offline analytics possible in avi,mp4, mpeg, h264 and asf file formats	
	Offline analytics should run in batch mode to take every file from specified folders and run analytics one by one on each file automatically.	
	Pre-buffer and Post buffer recordings up to 10 minutes for video analytic events.	
	Minimum and maximum object size based filtering.	
	Define schedule of video analytics to run weekly, daily, day/night or according to user specified date and time	
	Define minimum 20 shapes, lines or zone in single camera for video analytics.	
	Option to run analytics in silent mode.	
	View snapshots of each event and click on event to play recording of that time period.	
	Ability to virtually map devices to one another in the VMS. For example Fixed cameras and PTZ cameras so that event from fixed cameras can be used to notify PTZ cameras to Zoom, Pan or tilt or go-to preset positions and take snapshots of events.	
	Reporting: Report of all events possible though bar and line charts.	
Administration & Failover	Automatic discovery of devices using UPnP and/or ONVIF	
	No software limit on number of cameras supported in single recording server	
	Add all cameras with single click. Apply settings to multiple cameras of same model with single click.	
	Failover- Automatic switch of user selected cameras to back-up server in case of failure.	
	Automatic Health check up and activation of optimization modules once CPU reached more than 85%.	
	Add multiple recording servers under same management server.	
	User role based cameras and feature access. Define users with passwords and access to only specific cameras	

	Complete server logs including login access, system settings change, archiving events, video or recording loss and all activity done by administrator or any other user in the system.	
	Camera Device Support	
	Should support multiple brand IP camera, encoders and DVRs. No restriction on camera hardware.	
	Should support ONVIF protocol including Profile-S	
	Device Integration	
	Should support Integration with external devices like Access Control, ANPR	
	and PIDS(Perimeter Intrusion Detection System)	
	System should integrate with third party systems like Radars and GPS tracking.	
	All the alarms can be shown in CCTV system. Ability to integrate with other devices by either sending events from VMS or receiving events from other devices. Event SDK support required from VMS. Events from VMS and Video Analytics should be able integrate with third party applications.	
Export	The System should allow export of audio/video evidences in open format	

Layer 3 Core Switch

Features	Description	Compliance Yes/No
Architecture	Proposed Switch should have 20 10/100/1000 SFP ports 4 Combo 10/100/1000BASE-T/SFP ports and 4 SFP+ ports	
	Switch should Support Internal/External Redundant Power Supply.	
	Switch shall have SD Card slot/USB/External flash for easy file store & restoration like firmware, configuration file, boot image, syslog etc.	
	RJ-45 & mini-USB console port, RJ-45 Alarm port, RJ-45 Management Port & 1 USB 2.0 Type A port	
	Shall support 1GB DRAM and 1GB flash	
	Switch shall have Internal/External 6 kV surge protection on all RJ-45 access ports	
Performance	The Switch shall have Non-blocking wire speed switch fabric with Min. 128 Gbps Back plane or higher	
	The Switch shall have Min.95 million pps or higher	
	The Switch shall support Min. 68K Mac address	
	The Switch shall be able to do Physical Stack min 9 units per stack or more with 80 Gbps or more stacking bandwidth (Stacking Modules & Cables to be provided Along)	
	The Switch shall be able to do IP Stacking up to 30 units per IP	
	The Switch Should support Jumbo Frame (up to 12K Bytes)	

Layer 2 switching	Switch should support ARP, Proxy ARP and Gratuitous ARP.	
	The LAN switch shall have IEEE 802.1Q VLAN encapsulation and should support 4k Vlans.	
	It shall have support for Detection of Unidirectional links and to disable them to avoid problems such as spanning tree loops	
	It shall support 802.1v Protocol-based VLAN	
	Should support MAC based Vlans	
	Should support GVRP or equivalent, Private Vlan or equivalent, Subnet Vlan or equivalent, Voice Vlan and QinQ (port based qinq and selective qinq).	
	Multicast VLAN to allow multiple VLANs to receive the same multicast traffic	
	Switch should have support for below Spanning Tree protocol Standards:	
	• 802.1D STP	
	• 802.1w RSTP	
	• 802.1s MSTP	
	The Switch should have 802.1AX Link Aggregation Up to 30 groups per device.	
	Port Mirroring One to one/Many to One, Flow based mirroring & VLAN Mirroring	
	Switch shall support ITU-T G.8032 Ethernet Ring Protection Switching to provide protection for Ethernet traffic in a ring topology, while ensuring that no loops are within the ring at the Ethernet layer	
The Switch shall have the intelligence to detect the loop occurring from the unmanaged network segment		
Layer 3 Routing Features	Switch should support Static routing for IPv4 and IPv6, RIP for IPv4 and RIPng for IPv6, OSPF, OSPF v3, BGP4, BGP4+ IS-IS v4/V6 and MPLS from day 1	
	Multiprotocol extensions for BGP4	
	Switch should support PIM-SM, PIM-DM, PIM-SDM, PIM-SMv6, DVMRP v3 and MSDP	
	Should have policy-based routing.	
	Route Redistribution support	
	IPv6 Tunnelling: Tunnel types should be supported are Static, 6to4, ISATAP and GRE.	
	Should support VRRP v2 & V3.	
	Should support Bidirectional Forwarding Detection	
Should support URPF, or equivalent, ECMP.		
Quality of service	Switch should support 802.1p priority queuing with 8 queues per port.	
	Queue Handling mode: WRR & Strict Mode, Strict + WRR and Weighted Deficit Round Robin (WDRR)	
	Granular Rate Limiting functions on per port & flow based to guarantee bandwidth in increments shall be as low as 8 Kilobits per Second.	

	Class of service shall be based on Switch port, DSCP, Vlan ID, TCP/UDP port, Protocol type, 802.1p queues, IPv4/v6 address, IPv6 flow label & User defined packet content	
	Broadcast and Multicast traffic/storm control	
	Weighted Random Early Detection (WRED) for congestion control	
OAM	802.3ah Ethernet Link OAM	
	802.1ag Connectivity Fault Management (CFM)	
	Switch shall support ITU-T Y.1731	
	Optical Transceiver Digital Diagnostic Monitoring (DDM) & Dying gasp	
Security	IEEE 802.1X Port Based Access control and Host based Access control and Guest Vlan	
	It shall support RADIUS/TACACS+ authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.	
	It shall have IP-MAC-Port binding	
	Switch should be able to authenticate and access control based on MAC and web (Http or Https)	
	BPDU Attack Protection, ARP protection, IP Source Guard, Dynamic ARP Inspection and DOS Attack Prevention	
	It shall support for SSHv2, SNMPv3 to provide network security by encrypting administrator traffic	
	Switch shall support 802.1Qbb Priority-based Flow Control (PFC).	
Management	The LAN switch shall have CLI support to provide a common user interface and command set with all routers and switches of the same vendor.	
	It should support RMON v1 and RMON v2	
	It shall support Trivial File Transfer Protocol (TFTP) to reduce the cost of administering software upgrades by downloading from a centralized location.	
	It shall support Network Timing Protocol NTP to provide an accurate and consistent timestamp to all intranet switches.	
	It shall support SNMPv1, SNMPv2c, and SNMPv3 and Telnet interface to deliver comprehensive in-band management, and a CLI-based management console to provide detailed out-of-band management	
	It shall have support for Netflow/Jflow/Sflow	
Certifications	UL/cUL, CB, CE, CCC, BSMI, EMI/EMC, FCC Class A, C-Tick, VCCI.	

Distribution Switch

Features	Specification	Compliance
Switch Hardware Specification	Switch with at least 24 X 10/100/1000BASE-T Ports and 2 x 10G Base-T and 4 X SFP+ Ports.	
	Switch should have console port for accessing the CLI of the switch.	

	Switch should have RJ-45 port for out-of band-management port	
	Switch should have USB port for connecting a USB storage device.	
	Switching capacity should be 168 Gbps or higher or non-blocking architecture.	
	Switch shall have 64 Bytes packet forwarding rate should be 125 Mpps or higher or non-blocking architecture.	
	Switch MAC table should be at least 16K or higher.	
	Switch should be standard 19 inch 1U rack mountable.	
	Switch should support internal/external redundant power supply for 1+1 redundancy and load sharing.	
	Physical stacking Up to 9 units per stack & Single IP Management (SIM) Up to 32 units per virtual stack	
	Switch should have one AC power with 100 to 240 VAC, 50/60 Hz, power supply should be supplied with switch from day 1.	
	Switch should have Smart fan design.	
	Operating temperature should be 0 to 50 °C.	
	Certification: FCC Class A, CE Class A, VCCI Class A, CB, cUL,	
Switch Software Specification	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.	
	Should support BPDU Filter, BPDU restriction, Root restriction	
	Support Jumbo Frame up to 9K Bytes or higher.	
	Should support Loopback detection (LBD) to detect the loop created by a specific port.	
	Should support IGMP Snooping v1/V2/V3 & IGMP groups 1K or more IGMP groups and require support for IGMP Snooping Fast Leave.	
	Should support MLD Snooping v1/v2 & MLD group 1K or more and require support for MLD Snooping Querier.	
	Should support 16 L3 IP interfaces and IPv4/IPv6 Loopback interface.	
	Should support IPv6 Neighbor Discovery (ND).	
	Should support VRRPv3, Equal-Cost Multi-Path (ECMP) and UDP helper.	
	Should support Static route for both IPv4 and IPv6, RIP V1/V2/ng.	
	Should have Policy-based Route (PBR).	
	Switch should support IEEE 802.1Q VLAN with different type of VLAN like Port based, Voice VLAN, Private, Double (Q-In-Q), Multicast VLAN (ISM VLAN for IPv4/IPv6), 802.1v Protocol VLAN, VLAN Trunking, Super VLAN	
	should have per-port broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.	

	Should support port security to secures the access port based on MAC address.	
	Require prevention of DoS attacks which include land, Blat, TCP Null Scan, TCP Xmas Scan, TCP SYNFIN, Ping of Death attack and TCP tiny fragment attack; or equivalent.	
	Should support DHCP snooping and DHCP server screening, DHCP server.	
	Should support 802.1X port based and 802.1X host-based access control, Identity-driven Policy (VLAN, ACL or QoS) Assignment	
	Should support RADIUS and TACACS+ authentication.	
	Should support Authentication database failover.	
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.	
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin, Strict + WRR, Congestion control using Weighted Random Early Detection (WRED) or WTD	
	Should support Remark 802.1p priority, Remark ToS/DSCP and Rate limiting in Policy map.	
	Support at least 1K ingress & 512 egress access control entries. ACL based on MAC, IPV4 and IPV6, PCP/UDP port No., User defined packet content, CPU interface filtering. Should support time-based ACL.	
	Able to manage trough Fully functional CLI interface.	
	Support for Telnet server, TFTP Client, FTP Client and Secure FTP (SFTP) client for IPv4/IPv6 access.	
	Should have multiple Image and configuration support to reduced down time for the switches.	
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).	
	Support for DHCP Client support for IPv4/IPv6, DHCP server, DHCP Relay and DNS client.	
	Should have SNTP/NTP protocol for time synchronization.	
	Should support CDP/UDLD, Link Layer Discovery Protocol (LLDP) and LLDP-MED.	

Industrial Grade POE Switch

Features	Specification	Compliance (Yes/No)
Hardware Features	Minimum 8 No's of 10/100/1000 Base-Tx PoE / PoE+ ports (Duplex, Full, Half) and 2 x 1GE (SFP/BASE-T) Combo Uplink port.	
	Switch should provide 240W of PoE budget with support for 802.3at standard	
	All ports should have features of auto- negotiate, flow control (802.3x), port-based network access control (802.1x), port security, MAC filtering etc.	
	Minimum Switching capacity of 20 Gbps or more	
	Should be IPv4 and IPv6 ready from day one	

Software Features	Should have IGMP snooping v1, v2, v3 & MLD snooping v1, v2 supporting min 100 multicast groups	
	Features of DHCP (including option 82), DHCP Relay NTP or equivalent, SNMPv1, v2 & v3, TELNET/ SSH	
	Should have console port for administration & management, CLI and web-based GUI for easy management	
	Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
	Port Security to secure the access to a port based on the MAC address of a user's device. The aging feature to remove the MAC address from the switch after a specific time to allow another device to connect to the same port.	
	Multilevel security on console access to prevent unauthorized users from altering the switch configuration	
	IP Source guard, Unicast, Broadcast & Multicast storm control	
	Switch should support sFlow to give complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats.	
	Switch should support STP, RSTP, MSTP & Ring protection for <50ms failover.	
	Port-based and 802.1Q tag-based VLANs, MAC-based VLAN, Guest VLAN, Private VLAN, also known as protected ports, with multiple uplinks, Q in Q Vlan	
	Switch should support L2/L3 ACL for added security.	
	Web/SSL, Telnet server/SSH, ping, traceroute, Simple Network Time Protocol (SNTP), Trivial File Transfer Protocol (TFTP), SNMP, RADIUS, syslog, DNS client, protocol-based VLANs, LLDP, Loop protection, Cable diagnostic.	
Power Supply	Switch should have Dual redundant DC power supply inputs.	
Operating Temperature	-40° to 75° C	
Enclosure	IP-30	
Certifications	CE, FCC, UL, ROHS, NEMA-TS2, Shock-Drop-Vibration Test	
	Networking OEM Should be international certification for the ISO 45001 Health and Safety Management System, Information Security Management System: ISO 27001, ISO 9001 Quality Management System, ISO 14001 Environmental Management System	

Fiber Cable

Sr. No.	Requirements	Compliance
1	The fiber type is a Matched Cladding Single Mode	
2	Fiber dual coated with acrylate coating.	
3	The fiber is optimized for operation at 1310 nm and at 1550 nm.	
	6 Core Multitube Fiber	

4	Should fulfill the Recording Mode: requirements of: IEC 793-2: 1992, EN 188101 and ITU-T Recommendation G.652	
5	Testing methods are in accordance with the following standards: ITU-T G.652.D, IEC 793-1 and Telecordia: GR-20 Core, ISO: 11801	
6	Maximum induced permanent loss after 1000 h at 1 bar H2 at 70 °C and out gassing for 72 h at 70°C (valid both at 1310 nm and at 1550 nm): 0.2 dB/km	

Fiber Patch Panels – Rack Mount

Sr.No	Requirements	Compliance
1	Have sufficient slots accommodate Simplex/duplex SC/LC/FC adapters individually.	
2	Aluminum base material for light mounting	
3	Should have Splice Tray & Cable Spool provision inside	
4	Accessory kit consists of cable ties, mounting ear screw earthling and spiral wrap tube.	
5	Can Include 48 LC,24SC,24 ST and 24 FC Terminations	
6	Removable Rubber grommet to allow for pre-terminated fiber trunk installation, protect cable and minimize dust build up	
7	Should have cable ties, mounting ear screws and spiral wrap tube	

Adaptors

Sr. No.	Requirements	Compliance
1	All SC/LC/FC adaptors should be Simplex and duplex type. Adapters should have compact design & high precision, which perform well under various circumstances & maintain good plug retention strength.	
2	Telcordia, TIA/EIA, IEC compliance	
3	0.20db for Zirconia Sleeve	
4	SC / FC Adapter 2.0N ~ 5.9N , LC Adapter-1.0N ~ 2.5N	

Optical Fiber Connectors

Sr. No.	Requirements	Compliance
1	Provide a field installable single mode connector to terminate fiber optic cables from cable-to-cable, cable-to-equipment and equipment-to-equipment.	
2	The connector must: Be field installable	
3	Utilize a PC polishing on the tip to provide high yield during installation.	
4	Meet EIA and IEC standards for repeatability.	
5	Insertion Loss <0.3 db	
6	Working Temp: -40 deg c to +85 deg c	
7	Standard: IEC 61754-20	
8	SC/LC/FC	

Optical Fiber Cords (minimum 3 Meters)

Sr. No.	Requirements	Compliance
1	All optical fiber patch leads shall comprise of Single mode 9/125µm fiber with SC/LC/FC, fiber connectors terminated at each end. The optical fiber patch leads shall comply with the following specifications:	
2	Optical Fiber – Corning Single Mode	
3	Connector: Zirconia ceramic ferrule	
4	Pre-radiuses and pre-polished ferrule	
5	Simplex / Duplex	
6	Color-coded Yellow for SM	
7	Insertion Loss - <0.2 db	
8	Cable: 9/125, SM	
9	Repeatability - < 0.2 db	
10	Durability – 1000 mating cycle	
11	Working Temp: -40 deg C.to + 85 deg. C	
12	Standard: G652D, G 657A & G 657B	
13	Length: 1,2,3,5 & on request	

10G SFP+ Transceiver for Single Mode Fiber

Sr. No.	Requirements	Compliance
1	Transceiver should be Enhanced Small Form-Pluggable (SFP+) form factor and compatible with quoted switches.	
2	Transceiver should be Hot pluggable and support 10G speed on Single Mode.	
3	Should be RoHS Compliant.	
4	Should be Multi-Source Agreement (MSA) specification compliant.	
5	Transceiver should be fcompliant with IEEE802.3ae standards.	
6	Transceiver distance capacity should be 10Km.	
7	Transceiver interface should be Duplex LC connector.	
8	Transceiver should support Single-mode 9/125 um fiber	
9	Operating Temperature: 0 to 70 °C	

42U Rack

Sr. No.	Requirements	Compliance
1	42U Enclosure Frame-800X1000-STEEL, Caster Wheels Set of 4 (2 with Brakes & 2 without Brakes)	

2	Adjustable Levellers set of 4	
3	Glass Door-800-42U, Metal Door-800-42U-Vented, Side Panels-1000-42U-Vented	
4	Mounting Hardware-(Pack of 20), FHU with 4 FAN 360CFM	
5	Vertical Power Distribution Unit with 12 x 5/15 sockets Round Pin, 230 Volts AC, 32 Amp with Plug	
6	Vertical Cable Manager-42U-Loop, Horz. Cable Manager-1U-Loop	
7	Conforms to DIN 41494 OR equivalent ISO Standards	
8	Adjustable 19" equipment mounting verticals provide the better mounting flexibility maximizing the usable mounting space	
9	Depth adjustable mounting slots	
10	Top and bottom Panel with ventilation and cable entry facility	
11	Provision to mount the cooling fans on the top panel	
12	Powder coated finish with pre-treatment process meeting all industry standards	
13	Grounding and Bonding Options can be provided	
14	100% assured compatibility with all equipment conforming to DIN 41494. General industrial standard for equipment	
15	Conforms to DIN 41494 or equivalent standard	
16	Welded Frame, Lockable Toughened Glass Door, Metal Vented Door Steel,	
17	DIN Standard 10mm Sq. Slots / Direct M6 Tap, 19" Mounting angles made of formed steel Powder Coated Welded to Frame, Vented and Field Cable entry exit cut outs	
18	Static Load 500 KG	

15U Rack

Sr. No.	Specification	Compliance
1	Adjustable 19" equipment mounting verticals provide the better mounting flexibility maximizing the usable mounting space	
2	Depth adjustable mounting slots	
3	Precision engineering capabilities and best efficient software configuration product technology provides the best product quality and fastest delivery in the industry	
4	Cooling fans mounted on Front Door with Top cover for Rain Water & Dust resistance.	
5	Powder coated finish with pre-treatment process meeting all industry standards	
6	Pole mounting Provision on the Rear Side with Centre Anti Revolve Bolt	
7	100% assured compatibility with all equipment conforming to DIN 41494. General industrial standard for equipment	
8	Front Door: Lockable Steel Door with Unique Key	
9	IP 55 Outdoor Pole Rack 15U	
10	Construction of Material- 1.2/1.5mm Thick CRCA sheet	

CAT 6 UTP Outdoor Cable, 4 Pair

S/N	Specification	Compliance (Yes/No)
1	This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801 and RoHS compliant.	
2	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.	
3	The 4 pair Unshielded Twisted Pair Solid Bare Electrolytic Grade Copper cable shall be UL Listed.(UL certification is optional)	
	Cable should UV Resistant, LSZH, Sheathed and Suitable for Outdoor Installations.	
4	Cable should support TENSILE STRENGTH: >9MPa, (9000KN/Square Meter)	
5	Attenuation (< 17 db), Pair – to – pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR.	
6	Nominal Outer Diameter of Cable should be 6.1 mm and Conductor Diameter 0.56 mm (23 AWG)	
7	Cable should support operating Temperature from -20°C to +60° C	
8	Cable should come with printed sequential Length Counter on each meter	
9	Cable support CONDUCTOR RESISTANCE (DC): 7.2Ω/100MTR@20°C. MAX.	
10	Mutual Capacitance of cable should be < 5.6nF/100m	
11	Capacitance Unbalance of cable should max 330pF/100m	
12	Cable support Delay Skew: < 45nS, Operating Voltage: 72V and NVP: 67%	
13	Category 6 UTP cables shall Supports Gigabit Ethernet (1000 base-T) standard and Operates at bandwidth of 250MHz.	

CAT 6 24 Port Jack Panel

Specification	Compliance
Be made of powder coated steel, in 24 port configurations.	
Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limit.	
Have port identification numbers on the front of the panel.	
Should have self-adhesive, clear label holders (transparent plastic window type) and white designation labels with the panel, with optional color labels / icons.	
IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch down tools	
Each port / jack on the panel should be individually removable on field from the panel.	
Improved cable management with optional cable management bar	
The Cat-6 transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard	

Jack Connector - Plastic Housing: ABS, UL94V-0 rated	
Operating Life: Minimum 750 insertion cycles	
Contact Material: Copper Alloy	
Contact Plating: 50µ” Gold plated on plug contact area	
Contact Force: 20N max (IEC 60603-7-4)	
Plug Retention Force: 15 lb.	
IDC Connector - Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent	
IDC cap: ABS, UL 94V -0	
Contact Material: Copper Alloy	
IDC Contact Plating: Phosphor bronze with tin plated	
Insertion Force: 20N max (IEC 60603-7-4)	
Wire Accommodation: 22-26 AWG solid	

CAT 6 Mounting Cords

Requirements	Compliance
The work area equipment cords shall, at a minimum comply with proposed ANSI/TIA/EIA-568-C.2 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair 100W Category 6 Cabling.	
Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.	
Should have 50 micro inches of gold plating over nickel contacts.	
Should be covered by ETL verification program for compliance with TIA 568.C.2	
Cable Conductor size: 24 AWG stranded bare copper	
Max O.D.: 5.6mm (.22”)	
Jacket: PVC UL-94V-O	
Temperature range: -10oC to +80oC	
Plug Operating life: Minimum 750 insertion cycles	
Contact blade: Phosphor bronze	
Contact plating: 50µ” Gold	
Plug dimensions & tolerances compliant with FCC Part 68.500 and IEC 60603-7	
Approvals: UL 444 for copper conductor	
Operating life: Minimum 750 insertion cycles	
Plug Di-electric with standing voltage :500 V AC	
Insulation resistance: 35 M Ohm (Max)	
Working Temp: -10°C to +70° C	

CAT 6 Information Outlet

Requirements	Compliance
Category 6, TIA568 C.2	
All information outlets for 100 W, 22-26 AWG copper cable shall:	
Use insulation displacement connectors (IDC)	

Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limits.	
Be constructed of high impact, flame-retardant thermoplastic with color and icon options for better visual identification.	
Shutter is on face plate	
Insertion force: 20N max (IEC 60603-7-4)	
IDC: Housing PC + glass fiber, UL 94 V-2	
568A/B configuration	
Information outlet (RJ45 jack) should be covered under ETL Verification program for compliance with TIA568. C.2	
Operation Temp: -10 C to 60 C	
Jack Connector- Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent	
Operating Life: Minimum 750 insertion cycles	
Contact Material: Copper alloy	
Contact Plating: 50 microns gold on plug contact area	
Plastic Housing: Polycarbonate + glass fiber UL94V-2 rated	
Operating Life: Minimum 200 Re-terminations	
IDC Contact Plating: Phosphor bronze with tin plated	

CAT 6 Face Plate

Requirements	Compliance
Single & DUAL square plate, Quad in Rectangular shape	
Write on labels in transparent plastic window – supplied with plate	
Screw hole covers – to be supplied with plate	
Face Plate with shutter	
Should be able to support variety of jacks – UTP, STP	

SAN STORAGE

S.No.	Features	Qualifying Minimum Requirements	Compliance
1	Operating Solution & Clustering Support	1. The storage array should support industry-leading Operating Solution platforms including: Windows 2016/2019, VMware and Linux.	
		2. Offered Storage Shall support all above operating Solutions in Clustering.	
2	Capacity & Scalability	The Storage Solution shall be offered with mentioned Usable Capacity using NL-SAS Drives at RAID 6 500 TB usable.	
3	Front-end Ports & Back-end Ports	1. Offered Storage Solution shall be supplied with 4 * 16 Gbps FC ports per controller.	
		2. Offered storage Solution shall support 12G SAS Back-end connectivity.	

4	No Single point of Failure	Offered Storage Array shall be configurable in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.	
5	Disk Drive Support	1. Storage Solution shall support Enterprise SAS spinning drives, SSD and and near line SAS / 7.2K RPM drives.	
		2. Offered storage array shall also have support for FIPS 140-2 validating self-encrypted drives.	
6	Cache	1. Offered Storage Array shall be given with Minimum of 12GB cache per controller and 1.92TB Flash/SSD cache per controller	
		2. Onboard Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology.	
		3. Offered Storage shall also have optional support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 8TB Flash Cache in dual controller system.	
		4. Offered Flash cache shall be tuned for random read operations and shall remain activated even at less than 70% of random average read workload.	
7	Raid Support	1. Offered Storage Sub Solution shall support Raid 1 , 10, 5 and Raid 6	
		2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array.	
		3. Thin provisioning shall be supported with offered Flash Cache.	
		4. Raid processing shall be offloaded to a dedicated ASIC instead of CPU. In case vendor is not supporting it then vendor shall ensure that additional 12GB cache per controller is configured to offset the raid processing workload.	
8	Point in time and clone copy	1. Offered Storage array shall be configured with array-based Snapshot and clone functionality and shall be configured for minimum of 512 snapshot licenses.	
		2. Offered Storage array shall support at-least 512 point in time copies (Snapshots) and 128 volume / Clone copies	
9	Replication	1. Offered storage Solution shall support storage-based replication to DR location. License for maximum supported capacity of the array shall be offered.	
		2. Offered storage Solution shall support replication to multiple storage array of the same family in fan-out mode. At least 1:4 mode shall be supported.	
10	Virtualization and Thin provisioning	1. Offered storage shall be offered and configured with virtualization capability so that a given volume can be striped across all spindles of given drive type within a given disk pool. Disk pool shall support all listed raid sets of Raid 1, Raid 10, Raid 5 and Raid 6.	
		2. Offered Storage shall be offered and configured with Thin Provisioning capability.	

11	Data Tiering	Offered Storage shall also be configured for Sub-Lun Data Tiering in real time fashion across different type of drives within a given pool like SSD, SAS, NL-SAS etc. License shall be configured for maximum supported capacity of the array.	
12	Global and dedicated Hot Spare	1. Offered Storage Array shall support Global hot Spare for offered Disk drives.	
		2. Atleast 2 Global hot spare drive shall be configured for every 30 drives.	
		3. Offered storage array shall have the support for distributed hot spare	
13	Logical Volume & Performance	1. Storage Solution shall support minimum of 512 Logical Units. Storage Array shall also support creation of more than 120TB volume at controller level.	
		2. Offered Storage shall have inbuilt performance management software. Configuration Dashboard shall show overall IOPS and MB/sec performance.	
14	Load Balancing & Muti-path	1. Multi-path and load balancing software shall be provided, if vendor does not support MPIO functionality of Operating Solution.	
15	Benchmark Performance	Offered storage shall have listed benchmark for performance of more than 250,000 in Raid 5 using appropriate drives at 8k block size. Vendor shall provide documentary proof for it.	
16	Array Integration	Offered storage Solution shall have plug-in for VMware VCenter, Microsoft Solution center as well as vStorage APIs (VAAI) for array integration.	

Professional Full HD LED Display

Item	Parameter	Description	Compliance
Panel	Screen Size	42"or Higher Commercial/ Professional LED TV's	
	Panel Technology	LED Back Lit	
	Resolution	3840X2160 4K Resolutions	
	Brightness (Type)	350 nits or higher	
	Contrast Ratio	4000:1 or higher	
	Response Time	8 ms or better	
	Viewing Angle	178x178	
Connectivity	Inputs require minimum	HDMI-2, USB-1, RJ45, RS-232C, Inbuilt Speakers For 42" 10Wx1, and for balance categories Minimum - 10WX2	
	Output	Audio	
	External Control	RJ232C, RJ45	

Certifications	Standard Certifications	CE/FCC/EMC and BIS Certification	
Operating Temperature & Humidity	Operation Temperature	0 °C to 40 °C or lower	
	Operation Humidity	10 % to 80 % or better	
Installation	Wall Mount or Table Stand	As per Site Requirement	
Warranty	5 Years Onsite warranty	Yes	

Server

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Form Factor	Max. 2U rack mounted with sliding rails	
2.	Supported CPU	Up to two 3rd Generation Intel Xeon Scalable processors with up to 40 cores per processor	
3.	Configured CPU	2* 16 Cores with clock speed of 2.9 GHz or better and with 24 MB cache or better	
4.	Memory slots	Up to 32 x DDR4 RDIMMs/LRDIMMs or higher	
5.	Memory configured	512 GB populated with 64 GB DIMMs 3200 MT/s or higher	
6.	Disks supported	Up to 24 x 2.5" SAS/SATA HDD or SSD or NVMe with universal slots	
7.	Disks configured	4* 2.4 TB 10K SAS 2* 960GB SSD RI Drive, 1 DWPD or better	
8.	RAID Controller	HW RAID Card with 4 GB Cache per card or higher	
9.	I/O slots	Up to 8 x PCIe Slots Gen4	
10.	Ethernet ports	4* 10/25GbE SFP28 Ports and 4* 1G Base-T ports. The server should be provided with port level and card level redundancy	
11.	Certification and compliances	Microsoft Windows Server, Hyper-V, VMWare, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES)	
12.	Power Supply	Platinum rated redundant Hot plug Power Supplies with hot plug fans	
13.	Management integration	Support for integration with Microsoft System Center, VMware vCenter	
14.	Power & temperature	Real-time power meter, graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	
15.	Pre-failure alert	Should provide predictive/ Actual failure monitoring and proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD	

16.	Configuration & management	<ul style="list-style-type: none"> • Real-time out-of-band hardware performance monitoring & alerting • Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health • Out-of-band hardware & firmware inventory • Auto configuration to auto deploy a baseline server configuration profile • Automated hardware configuration • Repository manager and self-updating firmware system • Support for Redfish API for simple and secure management of scalable platform hardware 	
17.	LCD panel	Should display system ID, status information and system error error code followed by descriptive text. LCD background should light up in different colours during normal system operation & error conditions.	
18.	Server security	Should have a hardened server design for protection, detection & recovery from cyber-attacks on hardware. Should provide effective protection, reliable detection & rapid recovery using: <ul style="list-style-type: none"> - Silicon-based Hardware Root of Trust - Signed firmware updates - Configuration and firmware drift detection - Automatic BIOS recovery - System erase 	
19.	Intrusion alert	Intrusion alert in case chassis cover being opened	
20.	Warranty	5 years On-site comprehensive warranty	

Workstation

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Processor	Intel Core i7-12700 processor (25MB Cache, 12 Core (8P+4E), 2.1GHz to 4.9GHz or higher	
2.	Chipset	Intel W680 chipset or higher	
3.	Memory	16 GB (2x8GB) DDR5, 4400 MHz Memory, expandable upto 128 GB (4 DIMM) or higher	
4.	Drive Controller	On board six channel sata@ 6Gbps, RAID (0,1) or higher	
5.	Hard Disk Drive	256GB PCIe NVME M.2 SSD+ 1TB 7200rpm SATA 3.5" HDD or higher	
6.	Expansion Slots	1 PCIe x16 slot; 2 PCIe x4 slots; Min 4 SATA slots for 2.5/3.5" HDD/ODD; Min 3 M.2 slots for NVMe SSD and 1 for Wifi & BT	
7.	Graphic Card	Nvidia T1000, 4GB, with necessary mDP to DP adapter	
8.	I/O Ports	Min 4x USB TypeA 3.2 Min 2x USB TypeC 3.2 Min 2x USB TypeA 2.0	

RFP for Supply and Installation of CCTV Cameras

9.	OS Certification	Workstation should support following OS: Windows 10 Professional for Workstation, 64bit or higher, Ubuntu Linux 20.04 or higher and RHEL 8.6	
10.	Networking	Intel Ethernet Connection 10/100/1000 or better	
11.	Out of Band Management	Intel vPro	
12.	Audio	Intelligent HD Audio delivers audio and mic enhancements and reduces background noise with internal speaker of higher	
13.	Power Supply	Minimum 300W (80 Plus Platinum) PSU 92% efficient PSU	
14.	OS	Windows 11 Pro for Workstations (64-bit)	
15.	DVD	DVD RW	
16.	Keyboard & Mouse	Same OEM make wired Keyboard & Mouse	
17.	Security	Trusted Platform Module (TPM 2.0), Chassis Intrusion Switch, Setup/BIOS Password, I/O Interface Security	
18.	Regulatory Compliance	Energy Star, EPEAT Gold registered	
19.	Monitor	23.8" and above IPS Antiglare display supporting 1920X 1200 @ 60 HZ, 16: 9 aspect ratio, Color gamut: sRGB 99% (typical), color depth 16.7 Mn; Height Adjustable stand	
20.	Type of Bundled Software	Artificial Intelligence Based system performance tuning software, which ensures optimum performance tuning	
21.	Vendor Status	Top three OEM as per latest IDC report for Workstations category	
22.	Warranty	5 Years Onsite Comprehensive Warranty	

SAN Switch

S. N.	Requirement	Compliance
1	The fibre channel switch must be rack-mountable. Thereafter, all reference to the 'switch' shall pertain to the 'fibre channel switch'	
2	The switch to be configured with minimum of 24 ports with 16 Gbps FC configuration backward compatible to 4/8.	
3	All 24 x FC ports for device connectivity should be 4/8/16 Gbps auto- sensing Fibre Channel ports.	
4	The switch must have hot-swappable redundant power supply & fan module without resetting the switch, or affecting the operations of the switch.	
5	The switch must be able to support non-disruptive software upgrade.	
6	The switch must be able to support state full process restart.	

7	The switch must be capable of creating multiple hardware-based isolated Virtual Fabric (ANSI T11) instances. Each Virtual Fabric instance within the switch should be capable of being zoned like a typical SAN and maintains its own fabric services, zoning database, Name Servers and FSPF processes etc. for added scalability and resilience.	
8	The switch must support up to 16 Virtual Fabric Instances.	
9	The switch must be capable of supporting hardware-based routing between Virtual Fabric instances.	
10	The switch must support graceful process restart and shutdown of a Virtual Fabric instance without impacting the operations of other Virtual Fabric instances.	
11	The switch shall support hot-swappable Small Form Factor Pluggable (SFP) LC typed transceivers.	
12	The switch must support hardware ACL-based Port Security, Virtual SANs (VSANs), and Port Zoning.	
13	The switch must support Smart Zoning such that the entries in the TCAM is significantly reduced and therefore increasing the overall scalability of the SAN Fabric.	
14	The switch must support Power On Auto Provisioning (POAP) and Quick Configuration Wizard for simplified operations.	
15	Inter-switch links must support the transport of multiple Virtual Fabrics between switches, whilst preserving the security between Virtual Fabrics.	
16	The switch must support routing between Virtual Fabric instances in hardware.	
17	The switch shall support FC-SP for host-to-switch and switch-to-switch authentication.	
18	ID and Destination ID. The support for load balancing utilizing the Exchange ID must also be supported.	
19	The switch must be equipped with congestion control mechanisms such that it is able to throttle back traffic away from a congested link.	
20	The switch must be capable of discovering neighbouring switches and identify the neighbouring Fibre Channel or Ethernet switches.	
21	The switch should support IPv6.	

1 KVA UPS

Sl. No	COMPONENT FEATURE	SPECIFICATION REQUIRED	Compliance Yes/ No Model No.
1.	Capacity in VA	1000VA	
2.	Capacity in WATTS	800 Watts.	
3.	Inverter Device	IGBT based PWM Technology Microprocessor control digital design double conversion true online UPS	
4.	Rated Output Voltage	230 V (1-Phase)	

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5.	Rated Output Current	2.8 A at 0.8 p.f.	
6.	Input Voltage Range	160-300V AC, 230V 50 Hz	
7.	Input Frequency Range	40 Hz to 70 Hz	
8.	No. of phases	Single Phase with Ground	
9.	Voltage Regulation (Mains Mode)	± 2% or better	
10.	Waveform	Pure sine wave	
11.	Power Factor	0.99 or better	
12.	Crest Factor	3:01	
13.	Output Power Factor	0.8 lag or more	
14.	Output Voltage	220V AC- 230V AC	
15.	Output Freq. Regulation (inverter mode)	50 Hz ± 0.5%	
16.	Overall Efficiency	≥88%	
17.	Cold start feature	Required	
18.	Overload Capacity	110% (for 10Minutes), 125% for 1 minute	
19.	Batteries	SMF (VRLA) Type to provide 1 hrs. backup Min VAH: 1512 VAH (inbuilt)	
20.	Transfer Line	0 ms	
21.	Noise Level	< 55 db @1meter.	
22.	By pass	static bypass	
23.	Compatibility	UPS to be compatible with DG Set Supply	
24.	Quality Standards	ISO-9001-14001 Certified Safety Standards and EMC Standards as per IEC standards	
25.	Software/ Interface	Software Option/ RS 232 port/ DB-9 Port (OPTIONAL), SNMP interface support	
26.	Additional / Extra Features Offered (If any)	Technical advantages	
27.	Warranty	One/ three years	

10 KVA UPS

Sl. No	COMPONENT FEATURE	SPECIFICATION REQUIRED	Compliance Yes/ No Model No.
1.	Capacity in VA	1000VA	
2.	Capacity in WATTS	800 Watts.	
3.	Inverter Device	IGBT based PWM Technology Microprocessor control digital design double conversion true online UPS	
4.	Rated Output Voltage	230 V (1-Phase)	
5.	Rated Output Current	2.8 A at 0.8 p.f.	
6.	Input Voltage Range	160-300V AC, 230V 50 Hz	

7.	Input Frequency Range	40 Hz to 70 Hz	
8.	No. of phases	Single Phase with Ground	
9.	Voltage Regulation (Mains Mode)	± 2% or better	
10.	Waveform	Pure sine wave	
11.	Power Factor	0.99 or better	
12.	Crest Factor	3:01	
13.	Output Power Factor	0.8 lag or more	
14.	Output Voltage	220V AC- 230V AC	
15.	Output Freq. Regulation (inverter mode)	50 Hz ± 0.5%	
16.	Overall Efficiency	>=88%	
17.	Cold start feature	Required	
18.	Overload Capacity	110% (for 10Minutes), 125% for 1 minute	
19.	Batteries	SMF (VRLA) Type to provide 1 hrs. backup Min VAH: 1512 VAH (inbuilt)	
20.	Transfer Line	0 ms	
21.	Noise Level	< 55 db @1meter.	
22.	By pass	static bypass	
23.	Compatibility	UPS to be compatible with DG Set Supply	
24.	Quality Standards	ISO-9001-14001 Certified Safety Standards and EMC Standards as per IEC standards	
25.	Software/ Interface	Software Option/ RS 232 port/ DB-9 Port (OPTIONAL), SNMP interface support	
26.	Additional / Extra Features Offered (If any)	Technical advantages	
27.	Warranty	5 years comprehensive onsite warranty	

Access Control System

S. N.	Specifications	Requirement	Compliance
Biometric Finger Scan Reader			
1	Technology		
2	Security	64 bit or AES crypto authentication keys. The Data flow between card and reader should be encrypted	
3	Function	Should be configured as a reader-enroller, Enroller only & Reader Only (All three are mandatory)	
4	Enrollment of fingerprint templates iClass Smart Cards	Yes	
5	Read Range	Minimum 3.5"	

6	Fingerprint Sensor	Optical	
7	Sensor Resolution	Minimum 500 dpi	
8	False Acceptance Rate	Less than 0.01%	
9	False Rejection Rate	Less than 0.01%	
10	Fingerprint Enrolment Software	Yes	
11	Technology Compliance	iClass 15693 or 14443	
12	Certifications	UL/CE	
13	Battery Backup	Rechargeable Lithium Ion	
14	LED Indicators	Three High intensity LED indicators red, amber and green	
15	LCD Panel	Monochrome Graphics supertwist LCD with backlight	
Controller			
16	Reader Inputs	Minimum 18 readers to be connected	
17	Universal Inputs	Six	
18	Tamper Input	One	
19	Digital Lock Inputs	Two	
20	Processor for Reader Inputs	Dedicated processor for each reader	
21	Communication	10/100 or higher Ethernet Port	
22	Memory	Minimum 1000 personnel Records and scalable to 10000	
23	Area Lockdown Support	Yes	
24	Real Time Clock	Yes	
25	Encryption	128-bit	
26	SNMP Support	Yes	
27	Visual Indicator	Yes	
28	Mounting	Wall/Ceiling Mount	
29	Battery Backup	5 Hours	
30	Card Reader Power	5V DC & 12V DC (Jumper Selectable)	
31	Wiring Distance	150 meters	

32	Push button Switches	Yes (For clearing memory and resetting IP Address)	
33	Offline Mode	Yes (In the event of Network Failure)	
34	Enclosure	Yes	
35	Device	Should be L1 registered device	

Video Wall

Technical Specification		Compliance Yes/ No
Video wall with min 50” or higher (3x2 Cubes)		
Size	50” Diagonal or more with complete configuration of 6 cubes (3 x 2). All cubes have to be of exactly same size cube depth <750 mm. Cube Depth < 700 mm	
High Brightness Uniformity	95% or above brightness uniformity ensures that a high-quality image is delivered across all displays	
Wide Viewing Angle	Accurately displays an image’s quality and color at a 178°/180° ultra-wide viewing angle	
Aspect Ratio	16:09	
Native Resolution	1920 x 1080 (FHD)	
Brightness	450 cd/m2 or higher	
Placement	The inter screen gap (bezel gap) should be <0.8 mm or batter	
Contrast ratio	1600:1	
Orientation	Portrait & Landscape	
Capability	Ability of Cubes to display high definition (HD) and standard definition (SD) content, Low maintenance	
Remote Management	Remote management through IP Remote management through IP for parameter adjustment. Each cube should have built-in web server	
Signal Interface	DVI/HDMI	
Access	Rear Only	
LED Life	The light source lifetime of the RGB LASER in eco mode should be min 100,000 hours or better	
Power Supply	Redundant Power Supply	

Video Wall Controller

S. No.	Minimum Specification	Compliance (Yes/No)
Make/Model:		
1.	General Display Controller should be scalable to control video wall in a matrix of MxN	

	(any combination of Row & Column) upto total of 6 screens. It should also be capable of taking universal inputs for video as well as data along with necessary wall management software's	
2.	Networking Dual-port Gigabit Ethernet Controller inbuilt Support for Add on Network adapters	
3.	Wall configuration: 4 DVI-D/HDMI Outputs	
4.	Resolution Output support: Minimum 1920x1080 or higher	
5.	Universal Inputs 4 Universal Inputs (Should be able to accept at least 3 kinds of signals i.e.DVI/RGB/HDMI)	
6.	Redundancy Support: System should have the redundancy support for following: <ul style="list-style-type: none"> - Controller Hard Disk Data - Power Supply - LAN 	
7.	Matrix Combination The video wall of any matrix combination (CR) should be capable of displaying multiple type of outputs as desired in ICCC facility	
8.	Software Compatible Video Wall Management software to meet the required functionality	

Video Wall Management Software

Make / Model:			
1.	Display & Scaling	The software should be able to pre configure various display layouts and access them at any time with a simple mouse click or based on the timer.	
2.	Input Management	All input sources can be displayed on the video wall in freely resizable and movable windows	
3.	Scenarios Management	Save and Load desktop layouts from Local or remote machines	

4.	Layout Management	Support all Layout from Input Sources, Internet Explorer, Desktop and Remote Desktop Application	
5.	Multi View Option	Multiple view of portions or regions of Desktop, Multiple Application Can view from single desktop	
6.	Other Requirement	<ul style="list-style-type: none"> ✓ SMTP Support ✓ Remote Control over LAN ✓ Alarm Management ✓ Remote Management ✓ Multiple Concurrent Client ✓ KVM Support 	
7.	Cube Management	<ul style="list-style-type: none"> ✓ Cube Health Monitoring ✓ Pop-up Alert Service ✓ Graphical User Interface 	

8 Channel Network Video Recorder with 4 Sata Ports

Item	Description	Complied (Y/N)
Two-way Talk	1 channel Input, 1 channel Output, RCA	
User Interface	GUI	
Video Output	1 HDMI, 1 VGA	
Video Resolution	HDMI: 3840 × 2160, 1920 × 1080, 1280 × 720, 1024 × 768 VGA: 1920 × 1080, 1280 × 720, 1024 × 768	
Channel	8 channel	
Bandwidth Incoming	160 Mbps or better	
Motion Detection	MD Zones: 396(22×18).	
Video Loss	supports	
Alarm Input	4 Channel	
Alarm Output	2 Channel	
Hard Disk	4 SATA III ports, up to 10TB Each (Min 10 TB to be populated from Day 1)	
Trigger Events	Recording, PTZ, Tour, Alarm out, Video Push, Email, FTP, Snapshot, Buzzer & Screen tips	
Recording Mode	Manual; schedule (general; MD; alarm; MD & alarm; intelligent; POS is optional)	
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)	
Backup Mode	USB Device/Network	
Playback	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom	
Max User Account	32 users	

Record Interval	10~60 min (default: 10 min), Pre-record: 5~30 sec, Post record: 10~300 sec	
Ethernet	1 RJ-45 port (10/100M/1000Mbps)	
Interface Ports	2 USB Ports (1 Rear USB 3.0 , 1 Front USB 2.0), 1 RS232, 1 RS485	
Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search , ONVIF 2.4, SDK, CGI	
Power Supply	DC12V/4A	
Working Temp	-10 ~+55°C / 10~90%RH / 86~106kpa	
Certification:	UL, BIS,CE , FCC, RoHS Compliant. OEM Cyber Security/Information Security Certificate, NDAA Compliance.OEM Should not be blacklisted anywhere Globally.	

16 Channel Network Video Recorder with 8 Sata Ports

Item	Description	Complied (Y/N)
IP Camera Input	16 channel	
Two-way Talk	1 channel Input, 2 channel Output, RCA (RCA is optional)	
User Interface	GUI	
Video Output	2 HDMI, 2 VGA	
Video Resolution	HDMI1: 3840 × 2160, 1920 × 1080, 1280 × 1024 (this is optional), 1280 × 720, 1024 × 768 VGA1: 1920 × 1080, 1280 × 1024, 1280 × 720, 1024 × 768; HDMI2/VGA2: 1920 × 1080	
Video Display Split	1st Screen: 16CH: 1/4/8/9/16, 2nd Screen: 1/4/8/9/16	
Channel	16	
Motion Detection	MD Zones: 396(22×18)	
Video Loss	Supports	
Alarm Input	16 Channel	
Alarm Output	4 Channel or better	
Bandwidth Incoming	320Mbps	
Hard Disk	8 SATA III Ports, up to 10TB Each, 1 eSATA Port (Min 20 TB to be populated from Day 1)	
Trigger Events	Recording, PTZ, Tour, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips	
Recording Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop	
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)	
Backup Mode	USB Device/Network/eSATA Device	
Playback	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom	
Max User Account	32 users	

Record Interval	10~60 min (default: 10 min), Pre-record: 5~30 sec, Post record: 10~300 sec	
Ethernet	2 RJ-45 port (10/100/1000Mbps)	
Interface Ports	3 USB Ports (1x USB 3.0, 2x USB 2.0), IRS232, 1RS485.	
Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	
Power Supply	Single, AC 100~240V, 50/60 Hz	
Working Temp	-10 ~+55°C / 10~90%RH / 86~106kpa	
Certification	UL, BIS, CE, FCC, RoHS Compliant. OEM Cyber Security/Information Security Certificate, NDAA Compliance.OEM Should not be blacklisted anywhere Globally.	

32 Channel Network Video Recorder with 8 SATA Ports

Item	Description	Complied (Y/N)
Two-way Talk	1 Channel Input, 2 Channel Output, RCA (RCA Feature is optional)	
User Interface	GUI	
Video Output	2 HDMI, 2 VGA	
Video Resolution	HDMI1: 3840 × 2160, 1920 × 1080, 1280 × 720,1024 × 768, VGA1: 1920 × 1080, 1280 × 720,1024 × 768, HDMI2/VGA2: 1920 × 1080	
Video Recording	Max 320Mbps	
Video Display Split	1st screen: 1/4/8/9/16/25/36, 2nd screen: 1/4/8/9/16	
Channel	32 channel	
Motion Detection	MD Zones: 396(22×18).	
Video Loss	Supports	
Bandwidth Incoming	320Mbps	
Alarm Input	16 Channel	
Alarm Output	4 Channel or better	
Hard Disk	8 SATA III Ports, up to 10TB Each, 1 eSATA port (Min 30 TB to be populated from Day 1)	
Trigger Events	Recording, PTZ, Tour, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips	
Recording Mode	Manual, Schedule (Regular, MD (Motion Detection) , Alarm, IVS), Stop	
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)	
Backup Mode	USB Device/Network/eSATA Device	
Playback	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom	
Max User Account	32 users	

Record Interval	10~60 min (default: 10 min), Pre-record: 5~30 sec, Post record: 10~300 sec	
Ethernet	2 RJ-45 port (10/100/1000Mbps)	
Interface Ports	3 USB Ports ((1xUSB 3.0, 2xUSB 2.0)), 1 RS232, 1 RS485	
Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	
Power Supply	Single, AC 100~240V, 50/60 Hz	
Working Temp	-10 ~+55°C / 10~90%RH / 86~106kpa	
Certification	UL, BIS, CE, FCC, RoHS Compliant. OEM Cyber Security/Information Security Certificate, NDAA Compliance. OEM Should not be blacklisted anywhere Globally.	

Generator Set 15KVA

15 KVA DG set water cooled	15 KVA / 12 KW silent DG set comprising of Water-Cooled Diesel Engine (LATEST CPCB NORMS COMPLIANT), Mini. 3 cylinders, Naturally Aspirated, developing 20 BHP or better @ 1500 RPM, Class A-1 / A-2 Governor & 10 KVA Alternator rated at 1 Phase, 230 Volts, 50 Hz; 0.8 p.f. @ 1500 RPM both mounted, and aligned on a common MS base frame complete with MS Fuel Tank, Residential Exhaust Silencer, AVM Pads fitted on base frame, 1 Nos. 12 Volts DC Battery with Battery Leads, 1st fill of Lube Oil, all housed in Sound Proof Acoustic Enclosure with AMF Control Panel with five years onsite warranty.
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20. Annexure 11: List of Additional Courts

NOTE: The following courts are not included in the list attached at Annexure-13. However, the same may be covered under this project at a later date. The Component-wise rates submitted in response to this RFP shall also apply to these Courts for which separate order would be issued to the successful bidder during the currency of contract:

S. No	Name of District	Name of Court
1.	Bilaspur	Civil Judge, Jhanduta
2.	Chamba	Civil Judge, Tissa
3.	Nahan	Civil Judge, Shillai
4.	Kangra	Civil Judge, Jaisinghpur
5	Mandi	ADJ, Sundernagar
		ADJ, Sarkaghat
		JMIC, Thunag
6.	Kullu	Civil Judge, Banjar

7.	Shimla	Family Court
8.	Mandi	Family Court
9.	Dharamshala	Family Court
Total		11 Courts

21. Annexure 12: Template for Performance Bank Guarantee (PBG)

PERFORMANCE SECURITY:

..... (Bank's Name and Address of Issuing Branch or Office)

Beneficiary: (Name and Address of Purchaser)

PERFORMANCE GUARANTEE No:

We have been informed that (name of Supplier) has entered into Contract No. (reference no of the contract) dated With you, for the supply of (description of goods).

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Supplier, we (name of the bank) hereby irrevocably undertake to pay you any sums or sums not exceeding in total an amount of (amount in figures)..... (amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the supplier is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire no later than theDay of, 2....., and any demand for payment under it must be received by us at this office on or before that date.

** The guarantor agrees to extension of this guarantee for a further period in response to the purchaser's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

Authorized Signatory for Bank

22. Annexure 13: Court-wise number of Court Rooms and equipment requirement:

Sl. No.	Name of Civil & Sessions Division in H.P.	Name of the District Court (DC)/ Sub Division Court (SDC)/ Tehsil Level Court (TLC) Complex in H.P.	Courts including Circuit/ Transit Courts in H.P.	No. of Court Rooms available at Court Complexes in H.P.	No. of Cameras	No. of POE Switch (8 Ports)	No. of POE Switch (24 Ports)	LAN Cabling (in mtrs)	UPS (1 KVA)	NVR with 4 SATA Slots with 12 TB HDD and 8 channels	NVR with 8 SATA Slots with 24 TB HDD and 16 channels
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Bilaspur	Bilaspur	1	6	12	2		480	1		1
2			1								
3			1								
4			1								
5			1								
6			1								
7		Ghumarwin	1	5	10	2		400	1		1
8			1								
9			1								
10			1								
11			1								
Sub Total			11	11	22	4		880	2		2
12	Chamba	Chamba	1	4	8	2		320	1		1
13			1								
14			1								

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15			1								
16		Dalhousie	1	1	2	1		80	1	1	
Sub Total			5	5	10	3		400	2	1	1
17	Solan	Solon	1	6	12	2		480	1		1
18			1								
19			1								
20			1								
21			1								
22			1								
23		Kandaghat	1	1	2	1		80	1	1	
24		Nalagarh	1	3	6	2		240	1	1	
25			1								
26			1								
27		Arki	1	1	2	1		80	1	1	
28		Kasauli	1	2	4	1		160	1	1	
29			1							1	
Sub Total			13	13	26	7		1040	5	5	1
30	Nahan	Nahan	1	6	12	2		480	1		1
31			1								
32			1								
33			1								
34			1								
35			1								

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36			1								
37		Paonta Sahib	1	3	6	2	240	1	1		
38			1								
39			1								
40		Rajgarh	1	1	2	1	80	1	1		
		Sarahan	1	1	2	1	80	1	1		
Sub Total			11	11	22	6	880	4	3	1	
41	Kangra at Dharamshala	Dharamshala	1	11	22						
42			1								
43			1								
44			1								
45			1								
46			1								
47			1								
48			1								
49			1								
50			1								
51			1								
52		Kangra	1	3	6	2	240	1	1		
53			1								
54			1								
55		Palampur	1	3	6	2	240	1	1		
56			1								
57			1								

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58		Dehra	1	3	6	2		240	1	1	
59			1								
60			1								
61		Nurpur	1	2	4	1		160	1	1	
62			1								
63		Jawali	1	2	4	1		160	1	1	
64			1								
65		Bajjnath	1	2	4	1		160	1	1	
66			1								
67		Indora	1	2	4	1		160	1		
68			1								
Sub Total			28	28	56	10	1	2240	8	6	2
69	Mandi	Mandi	1	9	18		1	720	1		2
70			1								
71			1								
72			1								
73			1								
74			1								
75			1								
76			1								
77			1								
78		Sundernagar	1	2	4	1		160	1	1	
79			1								
80		Jogindernagar	1	1	2	1		80	1	1	
81	Sarkaghat	1	2	4	1		160	1	1		

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82			1								
83		Karsog	1	1	2	1		80	1	1	
84		Gohar	1	1	2	1		80	1	1	
Sub Total			16	16	32	5	1	1280	6	5	2
85	Shimla	Shimla	1	21	42	2	1680	1	1	3	
86			1								
87			1								
88			1								
89			1								
90			1								
91			1								
92			1								
93			1								
94			1								
95			1								
96			1								
97			1								
98			1								
99			1								
100			1								
101			1								
102	1										
103	1										
104	1										

RFP for Supply and Installation of CCTV Cameras

105			1								
106			1								
107		Rohru	1	3	6	2		240	1	1	
108			1								
109		Jubbal	1	1	2	1		80	1	1	
110		Chopal	1	1	2	1		80	1	1	
111			1								
112		Theog	1	3	6	2		240	1	1	
113			1								
Sub Total			29	29	58	6	2	2320	5	5	3
114			1								
115		Rampur Bushahr	1	4	8	2		320	1		1
116			1								
117			1								
118		Anni	1	1	2	1		80	1	1	
119		ReckongPeo	1	2	4	1		160	1	1	
120			1								
Sub Total			7	7	14	4	0	560	3	2	1
121			1								
122		Kullu	1	5	10	2		400	1		1
123			1								
124			1								
125			1								
126		Manali	1	1	2	1		80	1	1	

RFP for Supply and Installation of CCTV Cameras

127		Kelong	1	1	2	1		80	1	1	
Sub Total			7	7	14	4	0	560	3	2	1
128	Una	Una	1	8	16			640	1	1	1
129			1								
130			1								
131			1								
132			1								
133			1								
134			1								
135			1								
136		Amb	1	3	6	2		240	1	1	
137		1									
138		1									
Sub Total			11	11	22	2	1	880	2	2	1
139	Hamirpur	Hamirpur	1	8	16			640	1	1	1
140			1								
141			1								
142			1								
143			1								
144			1								
145			1								
146			1								
147		Barsar	1	1	2	1		80	1	1	
148		Nadaun	1	2	4	1		160	1	1	

RFP for Supply and Installation of CCTV Cameras

149			1								
<u>Sub Total</u>			11	11	22	2	1	880	3	3	1
Total			149	149	298	53	6	11920	43	34	16