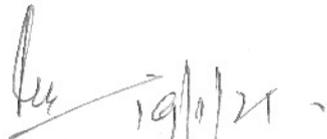




**Tender Document no.01/21,
Tender Call notice no. _____
Office of the Commissionerate Police, Bhubaneswar-Cuttack,
Bhubaneswar.**

1. Sealed tenders are invited from the eligible Service Providers/firms for providing 6th year Annual Maintenance Contract of CCTV Surveillance System of Commissionerate Police, BBSR-CTC, Bhubaneswar as indicated in the tender document. As tender documents are available on the Web site of Commissionerate Police i.e. www.bhubaneswarcuttackpolice.gov.in, Odisha Police i.e. www.odishapolice.gov.in and in Govt. of Odisha Web site i.e. www.odisha.gov.in.
2. The Tender Documents may be obtained.
 - (a) On payment of Rs.5900/- (Rupees Five Thousand Nine Hundred) only between 10 AM to 5 PM on each working day from the office of the undersigned at the address given below.
 - (b) By sending a self stamped (Rs.80/-) envelope of size not less than 35 cm x 25 cm along with a Demand Draft A/c payee of Rs.5900/- (Rupees Five Thousand Nine Hundred) only payable at S.B.I. Treasury Branch, Bhubaneswar drawn in favour of DDO-I, Police Commissionerate, BBSR-CTC, BBSR for the tender.
 - (C) Tenders can be sent through registered post, speed post, courier or put personally in the sealed tender box kept at the office of the **Dy. Commissioner of Police (Hdqrs.), Bhubaneswar-Cuttack, BidyutMarg, Bhubaneswar,751001, Tel No.- 0674-2530035 / Fax No. 0674-2530001.**
3. Bids submitted otherwise than the prescribed manner in the tender documents shall be rejected.
4. Date of Issue of Tender documents on dtd. **25.01.2021 at 10.00AM.**
5. Last date of Issue of Tender document on dtd. **18.02.2021 up to 5.00 PM.**
6. Last date for receipt of sealed Tenders on dtd. **20.02.2021 up to 5.00 PM.**
7. Date for opening of sealed Tenders / Technical Bids on dtd. **22.02.2021 at 11.30 AM** in the Office of **Dy. Commissioner of Police (Hdqrs.), Bhubaneswar-Cuttack, Bidyut Marg, Bhubaneswar,751001, Tel No.-0674-2530035 / Fax No. 0674-253001.**


**Dy. Commissioner of Police, (Hdqrs.)
Bhubaneswar- Cuttack.**

BID DOCUMENT

EXPRESSION OF INTEREST
FOR
COMPREHENSIVE MAINTENANCE (1 YEAR)
FOR
CCTV BASED SURVILLANCE SYSTEM
IN
CITY OF BHUBANESWAR

NAME OF THE WORK:
CCTV based Surveillance System
In City of Bhubaneswar



The Addnl. Commissionerate Police
Bhubaneswar-Cuttack Police Commissionerate,
Commissionerate Police, Bidyut Marg,
Unit - V, Bhubaneswar Pincode - 751001

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Expression of Interest

To

Comprehensive Maintenance (1 Year) For CCTV Based Surveillance System in City of Bhubaneswar.

DATA SHEET

Serial No.	Items	Description
1	Company Name	Commissionerate Police Bhubaneswar – Cuttack
2	Address	Commissionerate Police, Bidyut Marg, Unit - V, Bhubaneswar Pincode – 751001
3	EOI Reference Number	___/CP/_____/2020-21
4	Date of Issue of EOI	From 25/01/2021
5	Last Date for Submission of EOI Response	20/02/2021 up to 15:00 Hours
6	Cost of EOI document	Rs. 5900 /-
7	EOI validity period	90 days from last date of submission of bid
8	Currency of EOI	Indian Rupees
9	Language of EOI	English
10	Website	https://bhubaneswarcuttackpolice.gov.in/

The EOI document can be downloaded at the website mentioned above from 25/01/2021 to 21/02/2021 up to 15:00 Hours. The potential bidders who download the tenders from the website should submit a demand draft of Rs.5900/- at the time of submission of EOI responses. The cost of bid documents in demand draft issued from any Nationalised Scheduled Bank should be made in favour of **“Commissionerate Police”** and payable at **Bhubaneswar**.

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Contents

DISCLAIMER & PROPRIETARY NOTICE 4

Purpose of this EOI 5

The Scope of Work 6

Prequalification Process and General Conditions 8

Pre-Qualification Criteria for Systems Integrator..... 21

Response Requirements..... 23

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DISCLAIMER

Commissionerate Police Bhubaneswar – Cuttack intends to select a select a Bidder for Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar. Commissionerate Police Bhubaneswar – Cuttack intends to select well-established, experienced Bidders to execute the work with best of technology available to reduce the TCO and maintain the setup for next 1 Year. This document has been prepared based on available information in Commissionerate Police Bhubaneswar – Cuttack and other publicly available documents, which Commissionerate Police Bhubaneswar – Cuttack believes to be reliable. The sole objective of this document (the Expression of Interest) is to solicit response from interested parties for taking part in the future process leading to selection of consultant / companies to conduct the survey and submit its report. Commissionerate Police Bhubaneswar – Cuttack reserves the right to discontinue with the selection process of the bidder without assigning any reason thereof.

While this document has been prepared in good faith, no representation or warranty, express or implied, is or will be made, and no responsibility or liability will be accepted by Commissionerate Police Bhubaneswar – Cuttack or any of their employees, advisors or agents as to or in relation to the accuracy or completeness of this document and any liability thereof is hereby expressly disclaimed. Interested Parties may carry out their own study/ analysis/ investigation as required as part of their due diligence before submitting their responses.

This document does not constitute an offer or invitation, or solicitation of an offer, nor does this document or anything contained herein, shall form a basis of any contract or commitment whatsoever.

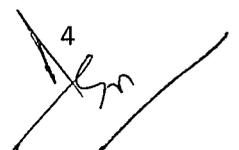
Some of the activities listed to be carried out by Commissionerate Police Bhubaneswar – Cuttack subsequent to the receipt of the responses are indicative only. Commissionerate Police Bhubaneswar – Cuttack has the right to continue with these activities, modify the sequence of activities, add new activities or remove some of the activities, as dictated by the best interests of Commissionerate Police Bhubaneswar – Cuttack.

PROPRIETARY NOTICE

This document contains confidential information of COMMISSIONERATE POLICE BHUBANESWAR – CUTTACK, which is provided for the sole purpose of permitting the recipient to evaluate the proposal submitted herewith. In consideration of receipt of this document, the recipient agrees to maintain such information in confidence and to not reproduce or otherwise disclose this information to any person outside the group directly responsible for evaluation of its contents, except that there is no obligation to maintain the confidentiality of any information which was known to the recipient prior to receipt of such information from COMMISSIONERATE POLICE BHUBANESWAR – CUTTACK or becomes publicly known through no fault of recipient, from COMMISSIONERATE POLICE BHUBANESWAR – CUTTACK or is received without obligation of confidentiality from a third party owing no obligation of confidentiality to COMMISSIONERATE POLICE BHUBANESWAR – CUTTACK.

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2.The Scope of Work

The Bidder has to provide Comprehensive Maintenance (1 Year) For CCTV based surveillance system in City of Bhubaneswar. The Locations of the cameras is provided below for accessing the condition of CCTV camera installed.

1. The bidder is required to conduct a detailed site survey for each installed Location and Command Centre to prepare a detailed action plan of maintaining the system which is already installed and operational since 24 December 2015.
2. Potential bidder needs to arrange a project kick-off session with the respective committee to set the expectation before the start of the maintenance.
3. Potential bidder needs to maintain IP based network CCTV system along with the requisite hardware and software for the CCTV surveillance system to connect the display unit.
4. Potential bidder must acquaint themselves fully about the assignment and the local conditions and usage before submitting the proposal. They may visit the installation site by 5 PM of 17.02.2021 with prior arrangement at their own cost.
5. Below are the Locations and the no. of cameras that are installed.

<u>Sl No</u>	<u>Location</u>	<u>PTZ Camera</u>	<u>Fixed Camera</u>
1	A.G.CROSSING	-	5
2	POWER HOUSE CROSSING	0	4
3	GOVERNOR HOUSE CROSSING	-	5
4	120 Bn. CROSSING	0	3
5	RABINDRA MANDAP CROSSING	1	2
6	PMG CROSSING	0	3
7	LOWER PMG CROSSING	1	0
8	HOUSING BOARD CROSSING	0	4
9	RUPALI CROSSING	0	4
10	MAUSIMA CROSSING	0	2
11	RABI TALKIES CROSSING	0	4
12	SIRIPUR CROSSING	0	2
13	NICCO PARK CROSSING	0	4
14	RAJMAHAL CROSSING	0	4
15	KALINGA CROSSING	1	-
16	RAM MANDIR CROSSING	1	3
17	MASTER CANTEEN CROSSING	1	5
18	BIJU PATNAIK CROSSING	0	1
19	KALPANA CROSSING	1	3
20	COMMISSIONERATE BUILDING	0	2
21	SISU BHAWAN CROSSING	0	4

22	HOSPITAL CROSSING (Capital)	0	4
23	NEW AIR PORT CROSSING	0	2
24	BIG BAZAR CROSSING (Ram mndir)	0	2
25	IN SIDE SECRETARIATE	3	9
26	OUT SIDE SECRETARIATE	0	0
27	ODISHA LEGISLATIVE ASSMBLY	0	0
28	BACK SIDE GOVERNOR HOUSE	0	1
Total no of Cameras 100 (Fix Camera 82, PTZ Cameras 9, & Control Room Cameras 9)			

6. The no. of camera / location may vary depending on the site conditions. Potential bidder has to factor this while participating in the EOI.

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3. Prequalification Process and General Conditions

3.1 Invitation for EOI: Commissionerate Police Bhubaneswar – Cuttack invites System Integrator to submit Expression of Interest (EOI) for selection of well-established, experienced and innovative companies for Comprehensive Maintenance (1 Year) For CCTV based surveillance system in City of Bhubaneswar. A notice inviting for Expression of Interest has been published in leading daily newspapers and uploaded in website <https://bhubaneswarcuttackpolice.gov.in/> as per standard practice of Government. This document with key details of the project and response formats is available for all potential and interested bidders through website or through the CP office. Two-part bid system shall be adopted, i.e., Techno-Commercial Offer and Price Offer.

3.2 Receipt of responses: The responses from potential bidders who are interested in participating for the selection process should submit the bid in the technical / commercial EOI. Two separate sealed covers with technical bid marked clearly as “**Technical Bid**” and financial proposal marked as “**Financial Bid**” should be submitted at the designated place, on a designated date and time as specified in this document.

3.3 Evaluation of responses: The information provided by the potential bidders as part of the response to this EOI will be evaluated against the conditions specified in the EOI to qualify for the subsequent processes of financial bid opening and subsequent system integrator selection. Bids will be opened in presence of bidders / representatives who are chosen to be present on the designated date and time.

First, the technical bids will be opened and their documents will be page numbered and signed by the Screening Committee Members.

Secondly, the bidder has to submit the maintenance plan which includes CCTV, Switch, BSNL Leased Line, AC, Electricity Connection from CESU, Generator and Passive cable as a proof to validate against the specified specification in this EOI, subsequent verification to be done post award with the plan.

3.4. Evaluation of the Proposals: The responses from bidders, who submit their technical proposals against the requirements of Commissionerate Police Bhubaneswar – Cuttack as specified in the EOI, will be evaluated.

Financial bids of only the technically qualified agencies/ organizations/ institutions will be opened in presence of representative of technically qualified agencies (who are chosen to be present) on the suitable date and time that will be informed later by e-mail / Notice.

After opening of the financial bid, Evaluation Committee will again meet and negotiate with the lowest bidder to arrive at the negotiated rate.

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3.5 Right to Terminate the Process:

- Commissionerate Police Bhubaneswar – Cuttack makes no commitments, explicit or implicit, that this process will result in a business transaction with anyone
- This EOI does not constitute an offer by Commissionerate Police Bhubaneswar – Cuttack. The bidder's participation in this process may result in Commissionerate Police Bhubaneswar – Cuttack selecting the bidders to engage in further responses, discussions and negotiations towards execution of a final contract. The commencement of any subsequent procurement activity resulting out of this EOI does not signify a commitment by Commissionerate Police Bhubaneswar – Cuttack either to continue the activities or to culminate such activities with a definitive contract.
- Commissionerate Police Bhubaneswar – Cuttack reserves the right to withdraw this EOI if it is determined that such action is in the best interest of the organization without assigning any reason whatsoever. Shortlisted bidders would be issued formal Request for Proposal inviting their technical and commercial bids later, provided Commissionerate Police Bhubaneswar – Cuttack decides to go ahead with the process.
- Commissionerate Police Bhubaneswar – Cuttack undertakes that all the information shared by the bidders will be held in strict confidence and will not be made public unless directed by court of law or under RTI norms.

3.6 Authenticity of the Information and Right for Verification

- Commissionerate Police Bhubaneswar – Cuttack reserves the right to verify all statements, information and documents submitted by the potential bidder in response to the EOI. Any such verification or lack of such verification by the Commissionerate Police Bhubaneswar – Cuttack shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Commissionerate Police Bhubaneswar – Cuttack.
- In case it is found during the evaluation of the responses or at any time during the subsequent procurement process or before signing of the contract or after its execution and during the period of project execution resulting out of the contract thereof, that one or more of the pre-qualification conditions have not been met by the bidder, or the bidder has made material misrepresentation or has given any materially incorrect or false information, the bidder shall be disqualified forthwith if not yet awarded the contract either by issue of the letter of intent or entering into a contract.

3.7 Additional Conditions

- Timing and sequence of events resulting from this EOI shall ultimately be determined by Commissionerate Police Bhubaneswar – Cuttack
- Responses are subject to rejection if they limit or modify any of the terms and conditions or specifications of this EOI

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- Neither the bidder nor any of bidder's representatives shall have any claims whatsoever against Commissionerate Police Bhubaneswar-Cuttack or any of its respective officials, agents, or employees arising out of or relating to this EOI or these procedures (other than those arising under a definitive service agreement with the bidder in accordance with the terms thereof).
- The Bidder should not bid under any Consortium. No Consortium bid shall be allowed for this EOI.
- The decision of the Commissionerate Police Bhubaneswar – Cuttack about selection of Vendors for issue of Prequalification applicants will be final. The Commissionerate Police Bhubaneswar – Cuttack is not bound to assign any reason thereof
- The bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India or any State Governments or any PSU in the country of India. (To be furnished under Notarized Affidavit)
- The bidder must not have any history of defaulting in execution of work orders issued by Government of India or any State Government or PSU in the country of India. A self-declaration certificate to this effect should be enclosed. (To be furnished under Notarized Affidavit)
- The bidder should not have been blacklisted by any Central/State Government institutions / undertaking and there should not be any pending litigation with any government department because of similar services. (To be furnished under Notarized Affidavit)
- No Criminal Proceedings in any Court of Law should be pending against the bidding Firm Or its Promoters Or its Directors Or its Executives. (To be furnished under Notarized Affidavit)

3.8 Amendment to bid documents:

- At any time, prior to the date of submission of bids, Commissionerate Police Bhubaneswar – Cuttack may for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bid documents by amendments.
- The amendments/Corrigendum will be notified on Commissionerate Police Bhubaneswar – Cuttack Website and these amendments will be binding on them. Bidders are advised to visit Commissionerate Police Bhubaneswar-Cuttack website regularly for updates on this Tender.

3.9 Extension of time: In order to give prospective bidders required time in which to take the amendments into action in preparing their bid, Commissionerate Police Bhubaneswar-Cuttack may at its discretion extend the deadline for submission of bid suitably.

3.10 Submission of Bids:

Only physical bids received by Commissionerate Police Bhubaneswar-Cuttack office will be considered for opening. Bids sent through fax or email will not be considered.

10



The Bid should be submitted in a sealed cover in two parts as under

- a) **Technical Bid:** Envelope should have subscribed "*Technical bid for Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar*". It should contain the EOI Fee and all details as mentioned in Technical Bid [Appendix – I to V]
- b) **Financial Bid:** The second envelope should have subscribed "*Financial bid for Supply, Installation, Commissioning and Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar*" and it should contain the rates etc. as per [Appendix VI].

3.11 Delivery:

- a) The successful bidder shall complete supplies strictly within the accepted delivery period required for replacement and shall be delivered to destination by the bidder firm securely packed as may be necessary.
- b) The Equipment's shall be maintained at respective locations to the satisfaction of concerned Authority.
- c) Commissioning/replacement of new CCTV Camera along with storage and connection and other accessories required for working of CCTV Surveillance System shall have to be carried out within the agreed cost during the maintenance.
- d) The comprehensive catalogue, which includes instructions for Operation, Maintenance, Trouble shooting and all other areas, which are necessary for smooth functioning of equipment, shall be provided.

3.12 Performance Security

- a) Within 10 days of the Contractor's receipt of Letter of Intent (LOI)/P.O., the Contractor shall furnish a Performance Security in the form of a Bank Guarantee for an amount equivalent to 10% of the contract/PO value issued by a schedule Bank from its branch in Bhubaneswar.
- b) The proceeds of the Performance Security shall be payable to Commissionerate Police Bhubaneswar – Cuttack as compensation for any loss resulting from the Contractor's failure to complete its obligations under the contract.
- c) The Performance Bond will be discharged by Commissionerate Police Bhubaneswar – Cuttack after completion of the Contractor's obligations including any warranty obligations under the contract.

3.13 Deliverables & Payment Schedule

Payment During CMC	Payment Terms	Deliverable
Payments during CMC Phase as per contract period	On Quarterly basis post completion of the quarter	SLA and other Reports for every month duly Approved by line departments

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3.14 Payment Terms

- a) All payments shall be made in arrears.
- b) The Bidder's request(s) for payment shall be made to the Authority in writing, accompanied by an invoice describing, as appropriate, services completed. The invoice should be submitted and upon fulfillment of other obligations stipulated in the contract.
- c) Payments shall be made promptly by the Authority within thirty (30) days after submission of the invoice or claim by the Bidder, after quality inspection and verification by Commissionerate Police Bhubaneswar – Cuttack
- d) Payment shall be made in Indian Rupees by RTGS / NEFT on Bank in the name of bidder.
- e) All remittance charges shall be borne by the Successful Bidder.
- f) In case of disputed items, the disputed amount shall be withheld and shall be paid only after settlement of the dispute.
- g) Any penalties/ liquidated damages, as applicable, for delay and non-performance, as mentioned in this EOI document, shall be deducted from the due payments of the respective milestones.
- h) Taxes, as applicable, shall be deducted / paid, as per the prevalent rules and Regulations
- i) It is the responsibility of the bidders to quote for and provide all the Hardware/ Software associate for meeting all the requirements of the EOI. In case during evaluation, it is found that Associate Hardware/ Software which is critical for meeting the requirement of this EOI and has not been quoted, the bid can be rejected as non-responsive. Additionally, if after the award of contract, it is felt that additional Hardware/ Software are required for meeting the RFP requirement and the same has not been quoted by the Successful Bidder, the Successful Bidder shall provide all such additional Hardware/ Software at no additional cost to Authority.

3.15 Service Level Agreement (SLA)

Service Level Agreement (SLA) shall become the part of contract between Commissionerate Police Bhubaneswar-Cuttack and the Successful Bidder. SLA defines the terms of the successful Bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section. The successful Bidder has to comply with Service Levels requirements to ensure adherence to project timelines, quality and availability of services.

The successful bidder has to supply software / automated tools to monitor all the SLAs mentioned below.

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

- There is a force majeure event effecting the SLA which is beyond the control of the successful Bidder
- The non-compliance to the SLA has been due to reasons beyond the control of the bidder. Theft cases by default would not be considered as “beyond the control of bidder”. However, certain cases, based on circumstances & certain locations, police may agree to qualify as “beyond the control of bidder”. Damages due to Road Accident / Mishap shall be considered as “beyond the control of bidder”. However, Power shut down or deliberates damage to camera / Pole would not be considered as “beyond the control of bidder”.

The Service Levels defined in the Key Performance Indicator are meant to enforce the successful bidder to abide by certain parameters which are defined in the subsequent section for the successful execution of the project during the implementation and maintenance phase. The levels are always defined between client and vendor; in case of this EOI it will set between Commissionerate Police Bhubaneswar – Cuttack and successful bidder as vendor.

The Service Level agreements have been logically segregated in the following categories:

- Equipment Availability
- Network Availability

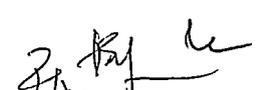
3.16 Definitions

For the purposes of this service level agreement, the definitions and terms are specified in the contract along with the following terms shall have the meanings set forth below:

- **“Uptime”** shall mean the time period for the specified services / components with the specified technical service standards are available to the user department. Uptime, in percentage, of any component (Non-IT& IT) can be calculated as:

$$\text{Uptime} = \{1 - [(\text{Downtime}) / (\text{Total Time} - \text{Maintenance Time})]\} * 100$$

- **“Downtime”** shall mean the time period for which the specified services / components with specified technical and service standards are not available to the user department and excludes downtime owing to Force Majeure & Reasons beyond control of SI.
- **“Incident”** refers to any event / abnormalities in the functioning of the Services specified as part of the Scope of Work of the Systems Integrator that may lead to disruption in normal operations of the Surveillance System.

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- **“Helpdesk Support”** shall mean the 24 x 7 x 365 centre which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.
- **“Resolution Time”** shall mean the time taken (after the incident has been reported at the helpdesk), in resolving (diagnosing, troubleshooting and fixing) or escalating (to the second level or to respective Vendors, getting the confirmatory details about the same from the Vendor and conveying the same to the end user), the services related troubles during the first level escalation.

3.17 Measurement of SLA:

The SLA metrics provides specifies performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on quarterly basis. The SLA also specifies the penalties for lower performance and breach conditions.

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

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

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

The aforementioned SLA parameters shall be measured per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SI and audited by Cuttack or its appointed Consultant for accuracy and reliability.

The System Integrator would need to configure the SLA Measurement Tools such that all the parameters as defined under SLA matrix given below can be measured and appropriate reports be generated for monitoring the compliance.

Commissionerate Police Bhubaneswar – Cuttack shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters. The SLAs defined, shall be reviewed by Commissionerate Police Bhubaneswar – Cuttack on a Monthly basis. All the changes would be made by Commissionerate Police Bhubaneswar – Cuttack after consultation with the SI and might include some corrections to reduce undue relaxation in Service levels or some corrections to avoid unrealistic imposition of penalty, which are noticed after project has gone live.

Total penalty to be levied on the SI shall be capped at **15% of the total contract value**. However, Commissionerate Police Bhubaneswar – Cuttack would have right to invoke termination of the contract in case the overall penalty equals **15%** of total contract value.

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Commissionerate Police Bhubaneswar – Cuttack would also have right to invoke termination of contract in case cumulative debit point (breach points) are above 30 in 2 consecutive quarters.

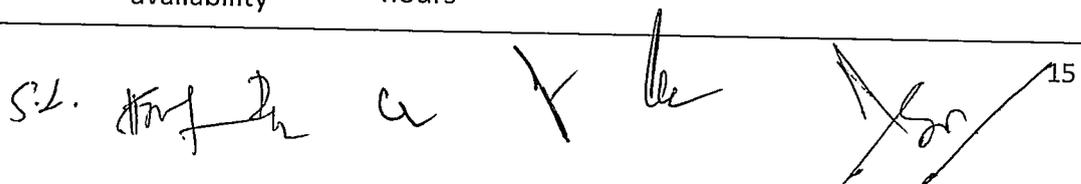
3.18 Planned Downtime

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

3.19 SERVICE LEVEL AGREEMENTS

i. Availability of Solution Related Service Levels			
Measurement	Definition	Target	Severity Level
Measurement		Availability > 99% during business hours	Nil
Availability of Command and Control	Application availability [Business Hours	Availability between 97% to 99% during business hours	Low
Application, Server	06:00 AM to 10:00 PM]	Availability between 95% to 97% during business hours	Medium
Uptime		Availability <95% during business hours	High

ii. Availability of Equipment Service Levels			
Measurement	Definition	Target	Severity Level
		Storage for 30 days at any point of time	Nil
Availability of Video Feeds for 30 Days	The bidder has to keep the video feeds stored for at least 30 days	Storage for 20 days at any point of time	Low
		Storage for 15 days at any point of time	Medium
		Storage for less than 10 days at any point of time	High
Workstation Uptime	Workstation availability	Availability > 99% during business hours	Nil

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[Business Hours 6:00am to10:00pm]	Availability between 97% to 99% during business hours	Low
	Availability between 95% to 97% during business hours	Medium
	Availability <95% during business hours	High

iii. Availability of Network Service Levels

Measurement	Definition	Target	Severity Level
Availability of Network	Total Number of cameras	>95%	Nil
	connected to Command & Control Centre at a given time	Between 90% to 95%	Low
		Between 85% to 90%	Medium
		Between 80% to 85%	High

iv. Application Maintenance related Service Levels

Measurement	Definition	Target	Severity Level
Response Time for Critical issues / bugs (Critical issue to be defined by Odisha Police, Consultant and Bidder at the time of finalization System Requirement)	"Response Time", means time taken by the Bidder's maintenance staff to acknowledge the call and initiate the actions thereof.	< 2 Hours	Nil
		Between 2 and 4 Hours	Low
		Between 4 to 6 Hours	Medium
		More than 6 Hours	High
Resolution Time for Non-Critical issues / bugs (Critical issue to be defined by Odisha Police, Consultant and Bidder at the time of finalization System Requirement)	"Resolution Time", means time taken by the Bidder's maintenance staff to troubleshoot and fix the bugs/defects from the time the Call.	1 Day	Nil
		>2Day	Low
		>3Day	Medium
		>5Day	High

v. Equipment's Inventory Related Service Levels

Measurement	Definition	Target	Severity Level
Battery replacement for UPS for all equipment / devices procured	Replacement of UPS battery (This excludes regular maintenance of the UPS and its batteries)	2 times in the three-year period starting from the Acceptance of System	Medium
Availability of spare part inventory such as camera cable, CAT 6 cable, etc. (To be finalized by Odisha Police, Consultant and Bidder at the time of finalization System Design)	An inventory of items that will be required for an immediate repair to be maintained for the surveillance cameras and other hardware for seamless operations	>=2 and <3 different classes of items in a month at a Purchaser's office >=3 instances in a month at a Purchaser's office	Medium High

vi. Training Related Service Level

Measurement	Definition	Target	Severity Level
Training provided by the Bidder	Bidder should prepare the feedback form for the trainees. The feedback form should rate the training on Likert scale from 1 to 5 as response	More than 75% of the trainees should rate the bidder training more than Average (i.e., rating of 3) < 75% trainees rating training above Average	Nil Re-training of the batch/ identified personnel

vii. Reporting Related Service Level

Measurement	Definition	Target	Severity Level
Availability and Performance	Provide monthly compliance report by the	SLA Violation of two times in six months	Low

Report	5 th of the following month.	Violation of four times in six months	Medium
		Violation more than four times in six months	High

3.20 SLA Matrix during CMC

Service Level Index	Measurements	Nil	Low (.5%)	Medium (1%)	High (2%)
i	Server Uptime	99%	97% - 99%	95% - 97%	< 95%
ii	Availability of Feeds for 30 Days	30 Days	25 Days	20 Days	< 15 Days
	Workstation Uptime (Availability)	99%	97% - 99%	95% - 97%	< 95%
iii	Total no. of Cameras Connected to Control Centre	>95%	90%-95%	85%-90%	80%-85%
iv	Response Time	<2 Hours	2Hrs – 4Hrs	4Hrs – 6Hrs	> 6 Hours
	Resolution Time	1 Day	>2 Day	>3 Day	>5Day
v	Battery Replacement	1 Day	>1 Day	>2 Day	>=2 Day
	Availability of Spares	< 2 Day	>2 Day	< 3 Day	>=3 Day
vi	Performance Report		2 Times Violation	4 Times Violation	> 4 Times Violation

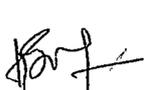
3.21 Severity Levels

Low: If service level is low then arbitration will be done by nodal officer whether to impose the penalty of 0.5% of the activity payment milestone. Decision taken by Commissionerate Police Bhubaneswar – Cuttack will be final in this regard.

Medium: If service level is medium then arbitration will be done by nodal officer and relevant stakeholders whether to impose the penalty of 1 % of the activity payment milestone. Decision taken by Commissionerate Police Bhubaneswar – Cuttack will be final in this regard.

High: If service level is high then arbitration will be done by empowered committee headed by Commissioner of Police whether to impose the penalty of 2% of the activity payment milestone. Decision taken by Commissionerate Police Bhubaneswar-Cuttack will be final in this regard.

3.22 Security Breach SLA

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

Definition Security of the video feeds and the overall system is quite important and successful bidder shall be required to ensure no compromise is done on the same. Security Breach types considered for this SLA are–

- Availability of Video feeds to any other user than those authorized by the Police Dept., and provided passwords
- Availability of any report / data to any other user than those authorized by the Police Dept., and provided passwords
- Successful hacking of any active component on the network by any standardized user
- Or any other privacy rule is broken as per Govt of India guidelines

Service Level Security compliance of the system should be 100%

Requirement

Measurement of Service Level Any reported security breach shall be logged into the SLA Management solution as a security breach

Parameter

Penalty for no achievement For every security breach reported and proved, there shall be a penalty of

of SLA INR 200,000/-.

Requirement

3.23 Sub-Letting: The Bidder cannot assign or transfer and sub-contract its interest / obligations under the contract without prior written permission of Commissionerate Police Bhubaneswar – Cuttack.

3.24 Annual Maintenance Contract:

- a) Service of all equipments in two months interval for each installed location has to be **signed and confirmed by authorized Person** appointed and payment shall be deducted if the servicing were not done for any specific duration.
- b) CMC shall be on-site comprehensive maintenance, which includes preventive as well as corrective maintenance. The bidder awarded with the maintenance contract shall carry out preventive maintenance of equipment once in every two months as per requirement and shall maintain the proper record thereof.

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- c) The agency shall ensure that the equipment is retained in its original or higher configuration and form. In the event of any downward alteration to the equipment by the agency or any attachment made thereto, the agency shall pay for any repair/replacement and adjustments required to restore the equipment to its original state. The faulty equipment parts replaced must be new and equivalent in performance of existing parts.
- d) Any contract that may result from this tender will be valid for a term of 1 Year (One Year) subject to the satisfaction of Commissionerate Police Bhubaneswar – Cuttack. Commissionerate Police Bhubaneswar – Cuttack will carry out an assessment after every 12 months. The contract would be renewed on a yearly basis for 1 Year and may be terminated on one-month notice if the performance of the agency is not satisfactory.
- e) Commissionerate Police Bhubaneswar – Cuttack reserves the right to extend the term for a period of one year on mutually agreed terms and conditions subject to the Commissionerate Police Bhubaneswar – Cuttack obligations at Law.

3.25 Force Majeure: The Bidder / Contractor shall not be liable for failure, non-performance or delays in services resulting directly or indirectly from causes beyond its reasonable control, such as, Act of God, war, act of Terrorism, nuclear risks, riots, strike, political unrest, acts of Government, its agencies or officers, or any other legitimate cause beyond his reasonable control.

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4. Pre-Qualification Criteria for Systems Integrator

The interested firms should have the credentials to meet all of the following criteria to become eligible bidders:

4.1 Criteria related to Incorporation of Potential Bidder:

- a) The Bidder should have been operational in India at least for the last Five financial years ending with 31.03.2020
- b) The potential bidder must not be a consortium of firms.
- c) The minimum average turnover of the bidder shall be Rs. 5 Crore (Rupees five Crore) for the last three years ending 31st March 2020 i.e., FY 2020-19, FY 2019-18, FY 2018-17.
- d) Net worth of the bidder during the last financial year shall be positive as per audited balance sheet.

4.2 The potential bidder should have experience of having successfully completed similar works in PSU / Govt. / Govt. Affiliated Bodies during the last 5 years ending 31st March, 2020 as per either i) or ii) or iii) below:

- i. One similar work order project in design, build, operation of IP Based CCTV Surveillance projects for minimum of 150 cameras.

OR

- ii. Two similar work order projects in design, build, operation of IP Based CCTV Surveillance projects for minimum of 125 cameras.

OR

- iii. Three similar work order projects in design, build, operation of IP Based CCTV Surveillance projects for minimum of 100 cameras.

(Please submit copy of Purchase Order and Completion Certificate from the Client).

4.3 The potential bidder should have experience of having successfully completed similar works in 24/7 City Surveillance Project during the last 5 years ending 31st March, 2020 as per either i) or ii) or iii) below:

- iv. One similar work order project in Operation & Maintenance of CCTV City Surveillance projects for which the cost of such work should not be less than Rs. 1crore

OR

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- v. Two similar work order projects in Operation& Maintenance of CCTV City Surveillance projects for which the cost of such work should not be less than Rs. 75 Lakhs

OR

- vi. Three similar work order projects in Operation& Maintenance of CCTV City Surveillance projects for which the cost of such work should not be less than Rs. 50 Lakhs

(Please submit copy of Purchase Order and Completion Certificate from the Client).

4.4 The potential bidder must have in-house Electronics, Instrumentation and electrical engineers with verifiable proven experience in executing CCTV Surveillance Project.

- i. The potential bidder should be having its own Service Office in the state of Odisha since last Five years ending with 31.03.2020.
- ii. The potential Bidder will be required to have G.S.T Registration as on date of Bid submission.

(Please submit duly signed and stamped copy of G.S.T. Registration Certificate).

- iii. Bidder should have valid PAN No.

Note: Bidder must provide necessary supporting documents as proof in respect of the eligibility criteria mentioned above

Handwritten signatures and initials

5. Response Requirements

Potential bidders may furnish their Expression of Interest by submitting the following documents in English language as per the indicated formats.

- a) Covering Letter as per the format provided in **Appendix I**
- b) Details about bidder organization with Supporting documents as per formats provided in **Appendix II**
- c) Supporting documents as per formats provided in **Appendix III** against qualifying criteria pre-qualifying criteria specified above.
- d) Litigation Impact Statement as per format in **Appendix IV**
- e) Technical Specification of Camera, Passive and Switch in **Appendix V**
- f) List of all List of all the items Installed in **Appendix VI**
- g) Price Bid as per format in **Appendix VII**

The Expression of Interest in a sealed cover along with the cover letter and each page of the response duly signed by an authorized signatory and affixed with the company's seal must reach the following address on or before **20/02/2021 up to 15:00 hours**. It is advised that the respondents keep the response brief, concise and to the point. It is suggested that the response, including annexure, should be less than 30 pages (with a font size of 12). The respondents are requested to submit the response in printed format (hard copy), along with signed letters and supporting documents in printed formats. The covering envelope containing previously mentioned documents submitted should be clearly marked with "Confidential – Expression of Interest for ***Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar***". The potential bidders who download the EOI document from the website should also submit a demand draft receipt of Rs.5900/- at the time of submission of EOI responses.

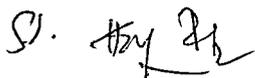
Indicative Timelines for this Expression of Interest notice are given below:

Publication of Expression of Interest	25/01/2021
Last Date for Submission of EOI Response	20/02/2021 up to 15:00hours
Opening of bid responses	22/02/2021 up to 16:00 hours

For further details and its operations, please visit Commissionerate Police Bhubaneswar – Cuttack Website <https://bhubaneswarcuttackpolice.gov.in/>

The response should be sent to the following address:

[Address]

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DCP Headquarters
Commissionerate Police, Bidyut Marg,
Unit - V, Bhubaneswar, Odisha
Pincode – 751001

If the bidder requires further clarifications, an email may be sent to this email ID adlcp@nic.in, for any queries on or before 17/02/2021. “[**Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar**]” may be included in the subject line.

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24



Appendix I:

Cover Letter from the System Integrator

Company letter head

[Date]

[Address]

DCP Headquarters,
Commissionerate Police, Bidyut Marg,
Unit - V, Bhubaneswar, Odisha
Pin code – 751001

Reference: Notice on Expression to Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar

Dear Sir,

This is to notify you that our company intends to submit a response to the EOI for Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar.

Primary and Secondary contacts for our company are:

Primary Contact

Secondary Contact

Name:

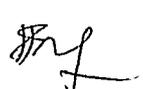
Designation:

Address:

Mobile No.

e-mail ID

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to Commissionerate Police Bhubaneswar – Cuttack is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the Commissionerate Police Bhubaneswar – Cuttack in its short-listing process.

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(Seal Here)

Appendix II:

RESPONSE FORMATS & SUPPORTING DOCUMENTS

The respondent must use the following formats to provide the information on organization for the pre-qualifying criteria specified above.

Details of the Organization and its supporting documents

Name

Nature of the legal status in India

Date of Incorporation

Date of Commencement of CCTV
(Surveillance) Business

GST Registration Number

PAN Number

Address of the Registered Office in India

Address of the Service / Support Centre in
Odisha

Average turnover during last three years ending 31st March 2020

	FY 2020-19
Financial	
Turnover	FY 2019-18
	FY 2018-17

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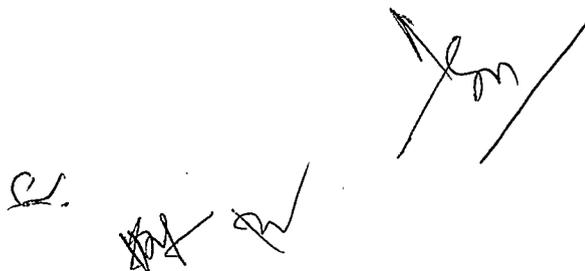


Net worth during last financial year

**No. of in-house Electronics,
Instrumentation and electrical engineers**

Supporting Documents

Certificate of Incorporation from Registrar of Companies (ROC), PAN, GST Certificate, Audited balance sheet, List of in-house electrical consultants

Handwritten signatures and initials at the bottom of the page. From left to right: a small signature, a signature that appears to be 'Raj', and a larger signature that appears to be 'Raj' with a long horizontal line extending to the right.

Appendix III:

RESPONSE FORMATS & SUPPORTING DOCUMENTS FOR EXPERIENCE

The respondent must use the following formats to provide the experience information as per the pre-qualifying criteria specified above.

Details of the Client Organization

Experience in Supply, Installation and Commissioning

Serial no.	Work Order No. & Client Address	No. of Cameras	Work Order Value
1.			
2.			
3.			

Total

Experience in Comprehensive Annual Maintenance contract

Serial no.	Work Order No. & Client Address	No. of Cameras	Work Order Value
1.			
2.			
3.			

Total

Supporting Documents

Self-attested Work orders along with Completion Certificate.

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Appendix IV:

LITIGATION IMPACT STATEMENT

Company letterhead

[Date]

[Address]

Commissionerate Police, Bidyut Marg,
Unit - V, Bhubaneswar, Odisha
Pincode – 751001

Reference: Notice on Expression to Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar

Dear Sir,

We have read and understood the contents of the Notice on Expression of Interest and pursuant to this hereby confirm that we satisfy the eligibility criteria laid out therein.

We hereby confirm that save as may be set out in the schedule attached to this statement, there is no litigation (including court, arbitration and other proceedings), inquiry or order from any regulatory authority, current or pending against us. Which if adversely determined might have material adverse impact on our ability to carry on our business or pay our debts as they fall due or on our ability to enter into any of the transactions contained in or contemplated in respect Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswar.

(Signature)

(In the capacity of)

Duly authorized to sign the EOI Response for and on behalf of:

Sincerely,

[BIDDER'S NAME]

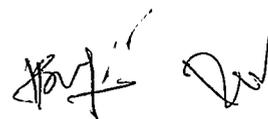
Name

Title

Signature

Date

Seal/Stamp of Bidder

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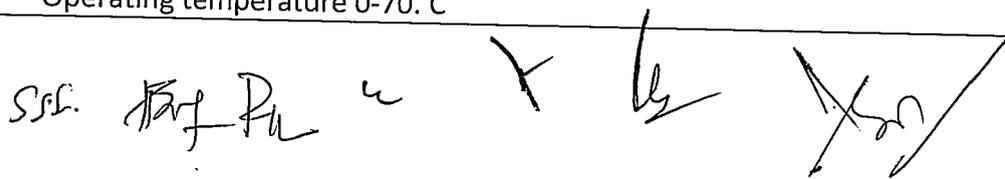


Appendix V: Technical Specifications

Hardware specifications of the City Surveillance Solution are as follows:

Hardware Specification

<u>Specification:</u>
A. ANPR Camera
i. IP camera: 1 megapixel above, Power over Ethernet
ii. HDTV 720p resolution or above
iii. Day night operation: Automatic removable IR cut filter
iv. Shutter Control: Manual adjustable: 1/1000 and above
v. Varifocal lens, auto-iris control remote focus
vi. Simultaneous H.264 and MJPEG streams
vii. Maximum Frame-rate: 30 fps or above
B. RLVD Camera
i. IP camera: 3 megapixel or above, power over Ethernet
ii. Day night operation: Automatic removal IR cut filter
iii. Shutter Control: Manual adjustable: 1/1000 and above
iv. Varifocal lens, auto – iris control remote focus.
v. Simultaneous H 264 and MJPEG streams
vi. Maximum Frame – rate: 30 fps or above
C. Illuminator
i. Type: IR illuminator
ii. Illuminator Range: 40 feet
iii. Environment Protection: IP66
iv. Wattage- 80 watts per lane
D. Cameral Housing
IP 65 Rated Environment Protection Housing
E. Workstation:
Local Control console shall be placed within 300 Mtrs of the camera placement. It shall company to following specification.
i. Intel core – i3 GHz or better
ii. 2 GB DDR3 RAM
iii. Storage Capacity: 1 TB
iv. Network Adapter (NIC). 100/ 1000 baseT
v. Operating System: Linux/ Windows
vi. Operating temperature 0-70. C



vii.	Encased in IP 65 rated casing for outdoor installation.
F. Server:	
(A virtual server created by VMware or equivalent will be used at the control room)	
Server for monitoring all violations and Hot listed vehicles from the different sites	
i.	Intel Xeon Quad- core 3.2 GHz or better
ii.	8 GB DDR3 RAM
iii.	Storage Capacity: 4 TB
iv.	Network ADAPER (nic). 100/1000 BASEt
v.	OPERATING sYSTEM: Linux/windows

CCTV Cameras

Full High-Definition IP Fixed Box/Bullet Type D/N Camera

Camera Specifications	
i.	Full High resolution IP colour cameras shall be of day/ night fixed box type suitable for outdoor surveillance with minimum following features.
ii.	Suitable sensor for very low lux performance: preferably 0.1lux@ F1.2 or better
iii.	Support Full High-Definition mode (1920X1080) real time
iv.	Minimum 2 Mega pixels Imager.
v.	Supports various protocols: IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTPs, FTP
vi.	Day/night switch by IR Cut filter
vii.	Web server for remote setup of camera video and network parameters
viii.	Power over Ethernet (PoE) & DC12V support
ix.	Supports CS mount lens
x.	Video compression format: H 264, JPEG
xi.	Two-way Audio preferable
xii.	Support wide dynamic Range, OEM to provide supporting document in this regard.
xiii.	Support Visibility enhancer
xiv.	Support Local storage
xv.	Required edge analytics features
xvi.	Audio Detection Feature to Detect Audio Level beyond Ambient Levels) Distress situation
xvii.	Voice Alert / Message- Camera should support voice alert/ message function to announce a pre-recorded message based on motion detection alarm/ sensor input
xviii.	Tamper Proof- To generate alarm in case of tempering event i.e., spraying the camera, blocking the FoV, covering the lens, changing the mounting direction etc.
xix.	E- PTZ Function &Pre-set- The camera should support e- PTZ function with minimum 8 pre-set positions.
xx.	
xxi.	Image Cropping – Should be capable of image cropping in all CODECs such that only the area of interest is transmitted to reduce the bandwidth and file storage requirement.

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Lens	Varifocal lens 12.5 mm to 50 mm
Field of view	
Image Resolution	Minimum 1080p," 1920X1080", 1280X1024", 1280X720", 720X576", 704X288", 352X288"
Compression & Frame Rate	H.264 & MJPEG compression with 30 ips
Day/Night Mode	Removable IR cut filter with selectable Auto /Day/ Night / Scheduled modes
Illumination	Colour: 0.2 Lux @ F1.2; B/W: 0.01 Lux @ F1.2;0.00 lux with IR illumination ON
IR LED	Capable of illumination up to 20 metres minimum
WDR	Digital wide dynamic range up to 96 B with 9 quality settings
Video Streaming	Dual streaming with H.264 & MJPEG compression simultaneously
HTTP & RTSP	HTTP & Real Time Streaming Protocol (RTSP/RTP) Support
Media Support	Windows Media player, Apple Quick time, VLC Player and others
Quality of Image setting	5 level settings for quality of H. 264 compression
Edge Analytics	Motion detection with 512 independent detection zones with sensitive: 0-100%
Credential logging	Store and utilize the user name and password of the SMTP server to enable protected email export.
Camera firmware	Linux based
Audio	Bi Directional Full Duplex
Audio Compression	G. 711u 64kbps
Edge storage	On-board local SD/SDHC card slot for a minimum of 32gb storage
Maximum throughput	1 mbps (Minimum)
Automatic Gain Control	
Automatic White Balance	
Privacy masks	
Supported Video Profiles	Minimum 2
Digital Inputs / outputs	2 x input & 2 x output is 1 x 3.5mm phone Jack).
ONVIF	Compliant
Security	Multi-level (At least 3 level) password protections, IP address Security littering, HT/PS encryption, User access log.
Protocols	IPv4, HMS, HTTP, TCP, UDP, RTP/RTCP/RTSP, DHCP, NTP, FTP, Protocols SMTP, UPnP, ICAIP, ARP, DONS, PPPoE, SAMBA
Housing	Minimum IP. & vandal resistant Aluminium Body Housing
Mounting	Integrated adjustable articulating wall mounting bracket allowing Mounting for precise positioning of the camera
Operating Temperature	

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Simultaneous Access	Minimum by 10 users
Electricals	12V DC, 24v AC, POE (ail 00o. SW Power rating
Regulatory Certificates	FCC Part IS, Class A and CE compliant.
Salty	U1.40950.1, 2nd Ed, CSA 022.2 No..50-1-07, 2nd Ed
Pre-alarm recording	Available
Field of view angle	Horizontal
Image	Minimum 1080p, "1920 X 1080", "1280 X 1024", "1280 X 720"
Resolution	720X576", 704X288", 352X288"

Full HD IP Speed Dome Camera with min 18X optical zoom (Day/Night)

a. The Camera should have the following feature:
o min 18x optical zoom and 12x digital zoom
o Full HD (1920 x 1080p), 25fps
o Wide Dynamic Range Capability.
o Weatherproof and dust tight with IP66 rated enclosure, heater and fan built in
• High speed of pan up to 300°/sec and tilt up to 300°/sec or better
o Minimum 256 Pre-set Positions & 5 Tours
• Built-in web browser for easy configuration
o Shall support dynamic noise reduction
o Shall Support H.264, MPEG-4, JPEG
• ONVIF Compliant profile S conformance
The camera shall have an Adaptive Rate Control (ARC)function when using MPEG-4 and H.264 compression. Thisfunction when enabled, shall allow the camera to maintain the frame rate at a reduced image quality when networkcongestion occurs. Should network bandwidth becomefurther restricted, the frame rate shall then dropautomatically to a suitable speed to maintain image integrity.
The camera shall be capable of image cropping in all codecs,such that only the area of rest is transmitted, to reducebandwidth and file storage requirements.
The camera shall support a letter box function. When theletter box function is enabled and resolutions except 16:9aspect ratio are chosen, the displayed image will have mattes (black bars) on the top and bottom of the image and will notbe stretched vertically.
• The camera shall be preferably be capable of deterring IIIIIIIII. The camera shall recognize a brute force attack and refuse FrrrP requests from an attacker's IP address for a preconfigured number of seconds. The camera shall determine that a brute force attack occurred when a client authentication error occurs five consecutive times. Brute Force attack prevention capability is not a mandatory requirement.
• The camera shall have privacy zone masking which blocks out unwanted or prohibited area within the video image to protect privacy. The camera shall be capable of masking up to 8 are. Such capability shall be via vendor supplied utility software or the browser-based setup menu.
• The camera shall support IP Filtering, whereby access to the camera can be restricted to one or more groups of selected users. Up to 10 different groups can be established by defining an IP address range for each group.
• The camera shall be capable of limiting the bandwidth from 64 kbps to 8 Mbps in MPEG-4 or H., and from 0.5 Mbps to an unlimited bandwidth in JPEG.
• The camera shall be capable of pre- and post-alarm buffering.

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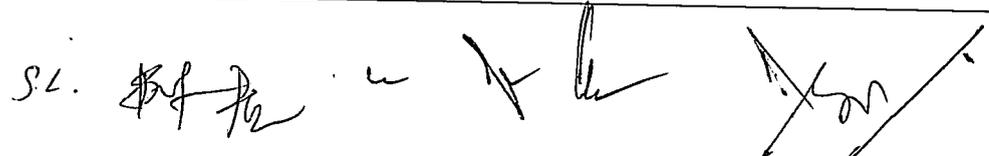
- The camera shall also have an 'Edge Storage function that operates as follows:
 - i. Capable of storing up to pre-alarm and post-alarm images and audio on a SD/SDHC memory card.
 - ii. Record in the codes format selected for monitoring.
 - iii. Recording to this storage area can be done manually or when an alarm is triggered.
 - iv. The trigger can be based on sensor input or network disconnection, connection, or a combination of those alarms using Boolean operands such as a logical 'AND', 'OR', or 'THEN'.
 - v. Capable of streaming the recorded c. using the same protocols us live streaming such asWIT/ RISP (IPv4), so that the user can view reconimage while recording.
 - vi. Capable of simultaneously streaming live video with recorded video by wring different sessions.
 - vii. Capable of downloading the recorded video at a variety of speed rates such as 0.5x and 2x speed.

The camera shall have an AGC capability.

White balance shall be selected at least among Auto or Manual and preferably for outdoor, indoor, artificial lamps of different colours.

Minimum Technical Requirements in Addition toAbove: -

Lens	18 Optical Zoom (wide telephoto), IR corrected, varifocal lens, Auto IRIS
Focus	Motorized auto focus
Shutter Speed	
Image Resolution	320 x 240 to 720x576
Compression & Frame Rate	H.264 & MJPEG compression with
Day/Night Mode	Removable IR cut filter with selectable Auto / Day/Night / Schedule modes
Illumination	Colour: 0.3 Lux, B/W: 0.03Lux
Present Pan	
Manual Pan/Tilt Speed	0.25 to 100° per second scaled in proportion to zoom position
Pan Angle	360° continuous, no end stops
Tilt Angle	105, 210' with the Tilt auto flip feature
Tilt and Pan Accuracy	+/-0.5
Zoom and Focus Accuracy	+/- 0.5%
Pre-set Positions	Minimum 90
Patterns	Minimum 16
Sequences	Minimum 16
Bit Rate (CUR)	Selectable: 16 kbps to 10 Mbps
Quality (VBR)	Selectable: 5 level settings
WDR	Wide Dynamic Range

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Video Streaming	Dual streaming with H.264 & MJPEG compression simultaneously
HTTP & RTSP	HTTP & Real Time Streaming
Media Player support	Windows Media Player, Apple QuickTime, VLC Player and others
Credential logging	store and utilize the user name and password of the SMTP server to enable protected email export.
Camera Firmware	Linux based
Audio	Bi Directional Full Duplex
Audio Compression	PCM, G711A, G7110
Edge storage	Maximum 32 GB SDHC
Automatic Gain Control	Available
Automatic White Balance	Available
Supported Video Profiles	Minimum 2
Digital Inputs / outputs	4 x input & 1 x output (form 1-C relay).
ONVIF	ONVIF 2.2 Compliant
Security	Multi-level password protections, IP address filtering, HTTPS encryption, User access log.
Protocols	IPv4, IPV6, TCP/IP, UDP, HTTP, FTP, DHCP, Zeroconf, Static IP, DNS, DDNS, NTP, SMTP, TLS, HTTPS, RTP, RTSP, Unicast Streaming, Multicast Streaming. The Canneed not adhere to DDNS protocol
Housing	Minimum IP66 & vandal resistant Aluminium Body Housing
Mounting	integrated adjustable articulating wall mounting bracket allowing for precise positioning of the camera
Operating Temperature	10° to 50° C not less than Zero degree
Humidity	95% non-condensing
Simultaneous Access	Minimum by 10 users
Electricals	12V DC, PoE Plus (all options)
Certificates	FCC: Part 15 Class A and CE: EN55022 Class A compliant.
Safety & Environmental	UL 60950-1, RoHS
Pre-alarm recording	Available Pre-Alarm recording can be provided at the VMS server side too instead of at the camera.

PRIMARY SERVERS (Qty = 2 Nos.)

(To host the virtual environment comprising ANPR, Video Management Server, Video Recording Server, Application/Database Server, NMS, RLVD Server)

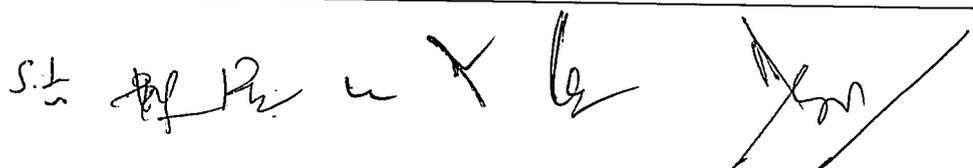
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Specification
Processor: 64-bit 6-Core, Intel Xeon E5-2630 or higher, Min 2.3 GHz or better
RAM: Min. 64 GB, 1333 MHZ, DUAL RANK, Expandable to 768 GB
No of processors: 2
CACHE: Minimum 15MB shared L3 cache PER PROCESSOR
OS-Should support Windows Server 2012, Windows Server 2008, RHEL, SUSE Linux and VMware
Virtualisation software:
A) VMware vSphere Enterprise Latest version per processor A total of four units to be supplied for both the servers. B) VMware Vcenter Server Standard (1 unit) to centrally manage the virtual machines and their hosts and to enable all vSphere features on both the Primary Servers. A total of 1 license to be provided for both the servers. C) All V sphere supplies shall include Support and Subscription for three years. D) There shall be no restrictions on physical cores or physical RAM with vSphere. There shall be no restrictions on number of virtual machines that can run on each processor. E) Relevant licenses, software, driver, firmware, etc. on sealed original genuine DVD/CD media.
Driver software: All necessary hardware drivers, system CTO configuration software, etc to be supplied on sealed OEM DVD/CD media
Storage: on Board RAID controller with 512 MB Non-Volatile flashed backed write and controller battery backed up cache. Raid 0/1/5/6 support required
2x 300Gb 6G SAS 2.5" 15k RPM Hot Pluggable SFF Hard Disk Drive expandable upto 8 SAS
Slim SATA DVD+/-RW Optical Drive Standard 10xMin
a) 10/100/1000 Mbps Ethernet Interface with RJ-45 Port Min 2(Two) Nos. b) 10GbE NIC-Min. 2(Two) Nos.
4(four) Nos. USB ports
64-bit system with Windows Server 2008 R2 OS
Graphics: Integrated with minimum 16 MB DDR memory
Form Factor: 2 U Rack Mountable
RAS Features: ECC in Memory, Hot-Swappable Disk Bays, Redundant Cooling Fans, Redundant Hot-Plug Swappable, Power Supply (230V, 50Hz) with Indian type power plugs
Remote Management: Remote Management card should support Virtual Media for patch/OS installation
FC Card Support: Should include 8 GBPS dual port FC card for SAN connectivity

Workstation PCs
Specification
Processor Intel Core i7

S.L. 

RAM: 4.0 GB
Hard Drive 1 TB - Serial ATA-300 - 7200.0 rpm
Microsoft Windows 7 Professional 64-bit Edition
Display Type 17.0 in 3
Graphics Processor AMD FirePro M5950
Optical Drive DVDRW
64-bit system with Windows 7
Latest anti-virus software with adequate user licenses on CD/DVD Media
Internet Explorer 9
Microsoft Silverlight 4
HD Graphics Card

UPS

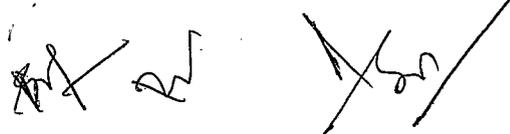
Specification
Field UPS for cameras in each junction with suitable power requirement to be provided.
On line UPS with two-hour backup for command & control room. Suitable capacity UPS should be proposed.

Firewall

Specification
The Bidder has to size and propose firewalls with the required components and modules.
The Bidder should ensure that all firewall devices are staged and comprehensively tested prior to deployment. In addition, the Bidder should conduct a vulnerability scan and analysis of the network to ensure that the optimal policies are instituted on the firewall
Firewall shall be a part of network that is designed to block unauthorized access while permitting outward communication.
Firewall shall be installed at server zone to provide features like high availability and fault tolerance

Storage

Features	Specifications
High Availability	Storage System shall be offered with high availability or in a no signal point of failure. Vendor shall provide all high availability licenses on the day 1 itself. Storage: "Dual active controllers & processing with quad core active processors in Power high availability mode and shall be scalable".
Processor	Offered STORAGE SYSTEM solution shall be configured with total of Signal OR Dual active Quad Core processors in power high availability mode and shall be scalable.
RAM	48 GB RAM and upgradable, SSD is not allowed to be used to meet the 48 GB RAM requirement.
Hard Drives	Shall be supplied with suitable SATA or SA drives

P.L. 

Storage Scalability	Storage subsystem shall be scalable to 100% or more in capacity. The requirement is for a SAN storage to ensure optimal performance with VN Ware.
Network Connectivity	Min-4 X 1Gbps auto sensing NICs ports and Minimum 4 x 10 Gbps NIC ports
Network support	TCP/ IP, ISCSI, FTP, CIFS, HTTP, NFS, Web Dev etc.
Fault Tolerance	RAID protection for OS as well as for the data disk. Offered Storage System shall support RAID 0 Raid 1, Raid 5, RAID 6. The offered system shall support Raid 5 or 6 in addition to Raid 0 and Raid 1.
Network Client Types Support	Should support Windows 7, Windows 208, Windows XP, HP-UX, AIX, SOLARIS & Linux, VMware, Open VMS
Manageability	Advanced web interface with following 1. Software with web interface for network management 2. Remote management through Remote desktop as well as through HTTP.
Data replication	Software for STORAGE-to-STORAGE optimized data replication. Software for STORAGE-to-STORAGE optimized data replication is not required.
Operating System	Suitable OS to make the Storage System work with other subsystems
Snapshots	Point in time copies of your data to guard against data corruption. The requirement is to be read as 'Storage System needs to support point-in-time copies at the storage level'
Availability	Offered Storage should provide 99.999 availability
Quality	The Storage OEM preferably should be in the Gartner Leader Quadrant or should be in TOP 5 OEM as per IDC.
Power Supply	Offered STORAGE SYSTEM shall have dual redundant power supply and load sharing FAN
Capacity & Scalability	Min 150TB usable after meeting the fault tolerance requirements + 1 Hot Spare for every 30 drives + Misc. plus the same storage system to grow Vertically (Performance) and Horizontally (Disc Storage Space) to 1 PB without a need for data migration.

Video Wall

Configuration
Resolution
Light Source Type
Brightness ANTSI
Brightness Uniformity
Wire control:
Remote
User Adjustment-Picture & Image
User Adjustment
User adjustment-On Screen Display style

Sr. [Signature] [Signature] [Signature] [Signature]

AC Power Input Range
Power Supply
Dual Power Supply for Complete Optical Engine & Input Box
Operating Temperature
Storage Temperature
Operating Relative Humidity
Storage Relative Humidity
Viewing Angle
Inter Screen Gap
Maintenance
Display controller

Video Wall

Description	Requirement
Size and configuration	20 ft length x 6 ft height with a deviation tolerance of 6 inches. Use of 70' cubes in 4x2 format will be preferable but achieving equivalent using other configurations acceptable
Resolution	(1920 x 1080) or better
Light Source Type	LED No loss of any colour should happen due to failure of any colour
Brightness	As suitable for control room applications
Wire control	As necessary, to operate with the control room hardware and software specified in the RFP to achieve scope of the project
Remote	Standard remote
User Adjustment- Picture & Image	Brightness, Contrast, Clock, Phase, H-position, V-position, Auto-adjust, Saturation, Hue, Sharpness, colour temperature, Reset, test pattern, Colour Coordinate Adjust
User adjustment-On Screen Display style	List type on Screen Display format
AC Power Input Range	
Operating Temperature	10oC to 40oc
Storage Temperature	-0o C + 60 oC
Operating Relative Humidity	20% to 80%
Storage Relative Humidity	10% to 85%
Inter Screen Gap	6 mm or less
Maintenance	Access for Maintenance preferably from rear
Display controller	Appropriate Display Controller must be provided to meet the specified requirements. The display controller and the display cubes should be from the same OEM to ensure flawless performance and scalability

Video Recording Server Specification

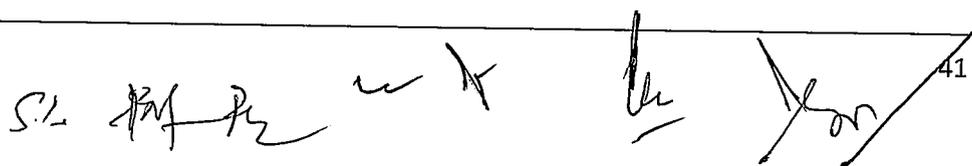
(This will be created using VM Ware on the hardware mentioned in 8.1.3 and hence the specs are only indicative. No quotation for the Hardware is required)

Parameters	Specifications
------------	----------------

Processor	Multi-core (64-bit) and multi-processor with virtualization, with 32-bit binary execution compatibility
Nos. of Core per Processor	4 Core or better
No. of Processor	2 Nos.
Clock Speed	2.4 GHz or better
Front side Bus	1333 MHz or better
L3 Cache	At least 8 MB Full Speed Cache or higher
RAM	At least 16 GB DDR3-1333 or higher
DIMM Slots	16 Memory slots
RAM Expandability	48 GB
Slots	Minimum 4 PCI Slots
HDD Bays	Should support upto 16 HOT Swap SAS/ SATA HDD bays
RAID Controller	RAID 0+1, 1, 3 or 5 or combinations
Hard Disks	
I/O Ports	4 USB, 2 serial, 1 Parallel, Keyboard, Mouse, 2 Ethernet (RJ-45), Monitor, microphone-in, Line-in (Stereo), line out (Stereo)
CDROM	48XDVD Rom
Graphics Memory	16 MB SDRAM
NIC	Integrated 2 Gigabit ports
Keyboard	To be Supplied with the machine
Pre-failure Notification	Pre-failure warranty covering processor, memory, HDD, Power Supply
Form Factor	Rack
Power Supply	Redundant hot swappable Power Supply, Fans
Remote Connectivity	Remote Management Module to enable remote management needed
Diagnostics	LEDs to identify failed components within the subsystem needed
System Management Software	OEM Server management software to be provided
Power management	OEM power management software to measure and define the use of electricity by the server
OS Version	64 bits with 32-bit execution environment (Mention)

8.1.13 Edge Switch (Industry Grade) POE

Specification
<ul style="list-style-type: none"> • Port Connector 10/100TX: RJ-45x4/8 POE • SFP Combo: RJ-45x2 OR 100/1000 SFPx2 • Console port: RJ45x1
Performance



<ul style="list-style-type: none"> Switching capacity 5.6 Gbps, Throughput 4.2 Mpps, Packet Buffer-1 Mbits, Mac Address 8K, Flash ROM 4Mbytes, DRAM 32 Mbytes, MBTF 272,000 hrs. or better
General Features
<ul style="list-style-type: none"> Redundance Using X-Ring, Dual Homing and Couple Ring
<ul style="list-style-type: none"> IEEE 802.1d STP and IEEE 802.1w RSTP
<ul style="list-style-type: none"> IP Access security, port security, DHCP Server, IP Binding per Port, IEEE 802.1x
<ul style="list-style-type: none"> IGMP Snooping / Query for multicast
<ul style="list-style-type: none"> Port trucking Static IEEE 802.1P Qos/ CoS/ ToS/ DSCP priority queuing
<ul style="list-style-type: none"> 802.3xflow control
<ul style="list-style-type: none"> Port Mirroring LLDP, Real time trace and Support IEEE 802.3af
<ul style="list-style-type: none"> Enclosure IP30, Metal with aluminum shell
<ul style="list-style-type: none"> Installation DIN rail/ Wall Mount Design, Switch Should be placed in IP66 Enclosure
Management
<ul style="list-style-type: none"> TFTP firmware update, system configure, restore and backup
<ul style="list-style-type: none"> SNMP v1/v2c/v3, Web, Telnet, CLI
<ul style="list-style-type: none"> Statistic, MAC Address Table, SNTP Syslog
<ul style="list-style-type: none"> E-Mail Alert SNMP Trap, RMON
Power
<ul style="list-style-type: none"> Power consumption 135 watts max
<ul style="list-style-type: none"> Power Input 12-48 VDC, Redundant power
<ul style="list-style-type: none"> Power Connector 6 poles terminal block x1
<ul style="list-style-type: none"> Relay Output 1A 24VDC All 4/8 ports shall support PoE with support Class 3 and 15.4 W per port
Environment
<ul style="list-style-type: none"> Operating Temperature-40-75oC
<ul style="list-style-type: none"> Storage Temperature-40-80oC
<ul style="list-style-type: none"> Storage Humidity 5-95% (non condensing)
<ul style="list-style-type: none"> Certification
<ul style="list-style-type: none"> Safety UL/c UL 60950-1, EMC CE, FCC Class A
<ul style="list-style-type: none"> EN61000-6-4, EN61000-6-2, EN61000-4-2(ESD) EN61000-4-3 (Radiated RFI)
<ul style="list-style-type: none"> EN6100-4-4 (Burst) EN61000-4-5 (Surge), EN61000-4-6 (Induced RFI) EN61000-4-8

Specification for Fibre Module.

Specification
FO Module should be fully compatible with Switch
Media Type: SMF
Wave length: 1310nm
Maximum Data Rate: 1.25Gbps
Distance: 10km
Digital Diagnostics: Yes

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Transmit Power: (min)-9dBm
Transmit Power: (max)-3dBm
Receive Sensitivity
at 1.25Gbps: (min) -20dBm
at 1.25Gbps: (max)-36dBm
Fiber Connectors: LC
Environmental Specifications
Operating Temp.: -5°C to 70°C
Operating Humidity: 0% to 85% (non-condensing)
Storage Temperature: -40°C to 85°C
Storage Humidity: 0% to 85% (non- condensing)
Approved Make: Cisco/ Allied Telesis/HP/Extreme/Juniper

Edge managed L2 switch with POE

Specification
Layer 2 Outdoor Hardened Managed Switch
Port Density
Six port switches with minimum four 10/100TX: RJ-45 and two SFP or 100/1000T Combo, The SFP slots shall support both 100 Fx and 1000SX /LX Optical transceivers
Console port: RJ4S x 1 or Equivalent
Key Features
Supports 100/1000Mbps SFPs
Optimized for CCTV operations.
Up to 7K MAC address table
12 -48 VDC Redundant power inputs, Bidder shall propose for Industrial grade AC power supply
IP 30 Metal Case
VLAN IEEE 802.1Q, GVRP, Port-based VLAN
The Ring technology should seamlessly interop / integrate with the Core and Distribution switches specified under this RFP
IP Access security, port security, DHCP Server, IP Binding per Port, IEEE 802.1x
IGMP Snooping/ Query for multicast
Port trucking, Static IEEE 802.1p QoS/CoS/ToS/DSCP priority queuing

802.3x flow control
Port Mirroring, LLDP, Real-time trace
Dynamic ARP Inspection
IGMP
Performance
Switching capacity 4 Gbps or better
Throughput 3 Mpps or better
Packet Buffer - Mbits
Mac Address 7K
Standards
IEEE 802.3, IEEE 802.3u, IEEE 802.3AB, IEEE 802.3z, IEEE 802.3x, IEEE 802.3ad, IEEE 802.1d, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1x

Management

TFTP firmware update, system configure, restore and backup

Specification
Port Density
24-port 10/100/1000T Gigabit ports
4 x 1000BASE-X SFP combo ports and Min 2 * SFP +slots for 10G scalability
Should support Active-Active Clustering VSS or equivalent technology for high availability and quick resiliency.
The VSS links between the 2 High Available switches should be min of 32 Gbps bandwidth with no single point of failure, all the required modules/ other related cards should be proposed from day 1
The proposed VSS technology should support high availability for both Layer 2 and Layer 3 Including for IP Multicasting applications
The VSS/equivalent high availability technology to connect the switches either locally or across the geographically diversified locations for high reliability
Performance
Forwarding Rate: 95Mpps
Switching Fabric: Min 128 Gbps or better
FuU environmental monitoring of PSUs, fans, temperature and internal voltages, with SNMP traps to alert network managers in case of any failure
IEEE Standards



 44

IEEE 802.IQ Virtual LANs
VTP or Equivalent technology
Resiliency
Resiliency as per the IEEE 802.17 / RPR / ERPS or equivalent technology for providing sub 50ms convergence time
Loop Protection and Loop Detection
RSTP /MSTP
Routing

L3 Managed Giga Switch with FO Port

Should support Static and RIP routes from day 1
Should support OSPF routes from day 1
Multicast Support
Internet Group Management Protocol v2/v3
Security
802.lx support
Private VLANs providing security and port isolation
Should support MAC address filtering and MAC limiting functionality.
Switch should provide the ability to monitor events and take corrective action proactively
The switch should support detection of Denial of Service (DoS) attack,
Radius/ TACACS +
Quality of Service
Policy based QoS features
Control plane traffic prioritization
WRED / SDWRR or equivalent queuing technology
Management
Out of band Ethernet management port and console management port
Port mirroring and sFlow
Optical Digital Diagnostics Monitoring (DDM).in accordance to the open standard specification SFF - 8472 or equivalent
An External memory card like USB or equivalent, allowing switch firmware, configurations to be stored for backup and distribution to other switches

S.I.  45

IPV6 specifications
6to4tunneling
DHCPv6 relay
DNSv6, SNMPv6, Telnetv6 and SSHv6, NTPv6
1Pv4 and 1Pv6 dual stack
Device management over 1Pv6 networks with
Transmission of 1Pv6 packets over Ethernet networks
Connection of JPv6 domains via 1Pv4 clouds

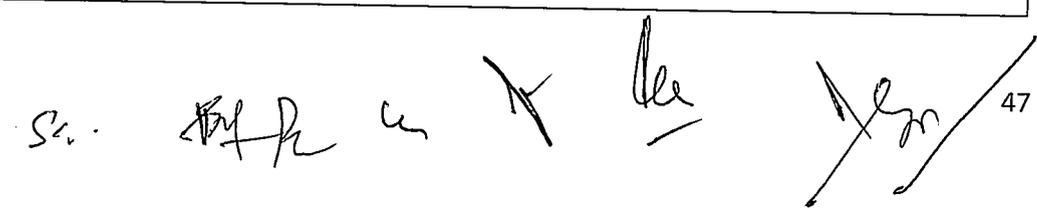
MLD and 1Pv6 Multicasting
Electrical Approvals and Compliances
Restrictions on Hazardous Substances (RoHS) Compliance
Energy Efficient Ethernet compliant (EEE) compliance
Interoperability
All active components including the SFP modules should be from one single OEM for seamless interoperability
Port Density
24-port 10/100/1000T Gigabit ports
4x100BASE-XSFPcomboportsandMin2*SFP+slotsfor10Gscalability
Should support Active-Active Clustering VSS or equivalent technology for high availability and quick resiliency.
The VSS links between the 2 High Available switches should be min of 32 Gbps bandwidth with no single point of failure, all the required modules/ other related cards should be proposed from day1
The proposed VSS technology should support high availability for both Layer 2 and Layer 3 for IP Multicasting applications
TheVSS/equivalenthighavailabilitytechnologytoconnecttheswitches either locally or across the geographically diversified locations for high reliability
Performance
Forwarding Rate: 95Mpps
Switching Fabric: Min 128 Gbps or better
Full environmental monitoring of PSUs, fans, temperature and internal voltages,withSNMPtrapstoavertnetworkmanagersincaseofanyfailure

46



IEEE Standards
IEEE 802.1Q Virtual LANs
VTP or Equivalent technology
Resiliency
Resiliency as per the IEEE 802.17 / RPR / ERPS or equivalent technology for providing sub SOms convergence time
Loop Protection and Loop Detection
RSTP / MSTP

Routing
Should support Static and RIP routes from day 1
Should support OSPF routes from day 1
Multicast Support
Internet Group Management Protocol v2/v3
Security
802.1x support
Private VLANs providing security and port isolation
Should support MAC address filtering and MAC limiting functionality.
Switch Should provide the ability to monitor events and take corrective action proactive/y
The switch should support detection of Denial of Service (DoS) attack•
Radius/ TACACS +
Quality of Service
Policy based QoS features
Control plane traffic prioritization
WRED / SDWRR or equivalent queuing technology
Management
Out of band Ethernet management port and console management port
Port mirroring and sFlow
Optical Digital Diagnostics Monitoring (DOM) in accordance to the open standard specification SFF - 8472 or equivalent


47

An External memory card like USB or equivalent, allowing switch firmware, configurations to be stored for backup and distribution to <i>otherswitches</i>
1Pv6 specifications
6to4 tunneling
DHCPv6 relay
DNSv6, SNMPv6, Telnetv6 and SSHv6, NTPv6
1Pv4 and 1Pv6 dual stack
Device management over 1Pv6 networks with
Transmission of 1Pv6 packets over Ethernet networks
Connection of 1Pv6 domains via Jv4 clouds
MLD and Jv6 Multicasting
Electrical Approvals and Compliances
Restrictions on Hazardous Substances (RoHS) Compliance
Energy Efficient Ethernet compliant (EEE) compliance
Interoperability

NetworkManagementSystem(150networkdevicesi.e.,Managedswit ches,IPcameras, appliance firewalleetc).

S. No	Technical Specification for Network Management Software
1	Automatic topology discovery and creation of network maps for Layer 3 and layer 2 network, All the available VLANS. Should seamlessly integrate Core switch at outdoor switches
2	Should have high level Network Inventory polling capability for IP Network nodes, All available line cards,Modules, ports, Physical links, VLAN interfaces and all the other SNMP capable devices in the network
3	Should have powerful administration control
4	Detailed performance monitoring and management
5	Should have extensive fault management capabilities with Real time Event and Alarm notifications,/ System Logs and Audit trials
6	Creation and management of security and QOS policies
7	Scheduled Device configuration back-up and restore functionality

48

8	. Automatic Detection of configuration changes for easy trouble shooting and Isolation
9	Should support 3rd party devices and end points
10	Should have the functionality of Group provisioning / Scheduled configuration roll out management
11	Should. have the ability to perform scheduled or Unscheduled network wide software or Firmware upgrades
12	Should have the ability to customize the NMS dash boards as per the requirements of police
13	Should have the ability to perform / create group of devices for applying same task.

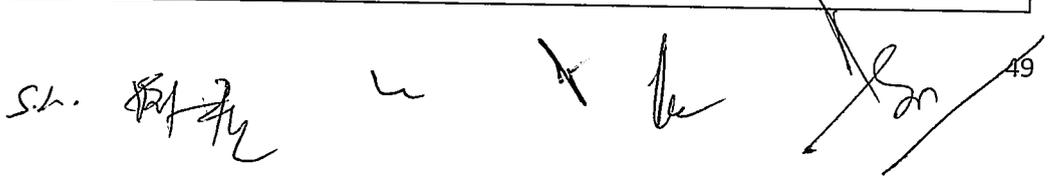
14	Should have extensive Event notification capability
15	Should provide the flexibility to the network administrator to assign task to an individual network engineer and assign ownership/ track the status of the issue resolution
16	Should have _extensive centralized trouble shooting tools .in built
17	The NMS solution should be preferably from the same Active switching vendor, in case vendors proposing for 3rd party NMS solution should provide all the interop reports certified by both the NMS vendor and Active switching vendor on seamless interoperability.
18	All the required Hardware/ Software licenses for the NMS solution should be proposed by the bidder

20KVA UPS AT CONTROL AND COMMAND CENTER

SPECIFICATION
Input phase: 3 phases
Output Phase: 1 Phase
Output Power: 20 KVA on line
Input/ Output Voltage: 165-270V AC/230V AC at 1 % variation
Frequency: 46 – 54Hz
Backuptimeatfullload: 2Hours
Battery Type: Maintenance Free

2KVA ONLINE UPS AT TRAFFIC JUNCTION

SPECIFICATION
Input phase: 1 phase
Output Phase: 1 Phase



Output Power: 2 KVA on line
Input/ Output Voltage:165-270V AC/ 230V AC at 1 % variation
Frequency: 46 - 54Hz
Backup time at full load: 6 Hours
Battery Type: Lithium Polymer

GANTRY FOR ANPRCAMERAS

SPECIFICATION
Shave: Inverted "L"
Height: 25Feet
Material: MS tubular hot dip galvanized (medium} pipes as per IS1239 (Part)-1990
Foundation: As per site requirement

POLICE FOR PTZ CAMERA

SPECIFICATION
Height: 20Feet
Diameter: 4 Inch
Material: MS tubular galvanized medium pipes as per 151239 (Party)-1990
Foundation: as per site requirement

OUTDOOR ENCLOSURE (TO HOUSE EMBEDDED SYSTEM, SWITCHES, UPS & BATTERIES)

SPECIFICATION
Features
Should be designed for outdoor applications
Traffic grade aluminum enclosure to protect battery backup power systems from outdoor elements
Variousmountingoptions(includingpole-mount)toprovidea flexiblesolutionforspaceconstrainedtrafficapplications
Large sun shield to reduce solar heat inside cabinet
Thermostat controlled fan and louvered vents to ensure reliable operation in high temperatures
180°stainlesssteelpianohingeddoorwithtwolockingopen positionstomakeinstallationandmaintenanceeasierand convenient
Three-pointlatchingmechanismwithCorbinType2lockfor maximumSecurity
Dimensions: 27H x 22W x 18D Inches
Construction: High strength corrosion resistant 0.125" thick aluminum
Finish: Natural Aluminum or painted israv
Equipmentspace:ElAstandard19",7RUspacewithone battershelf
Cable entrance
Bottom ofenclosure:1x3"diameterknock-out,4x1.125" diameterknock-out

Hinge type: Stainless steel pianos hinge
Door prom: Aluminum rod, 2 locking oven positions
Door latch: 3-point latch with integrated Corbin Type 2 lock
Cooling: Thermostat controlled 48Vdcfan, 100 cfm or greater. On at 49°C (120°F); Off at 32°C (89°F)
Door installed louvers: Equipped with washable filter
Audible noise: <46db at 1m (3ft) (when enclosure fan is on)
Mounting: Pole, host, wall, or pedestal
NEMA rating: 3R

(Signature)

(In the capacity of)

Duly authorized to sign the EOI Response for and on behalf of:

Sincerely,

[BIDDER'S NAME]

Name

Title

Signature

Date

Seal/Stamp of Bidder

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Appendix VI:**List of all the items Installed**

SL.No	Description	Qty	Make	Model
1	Primary Server and Failover Servers	04	HP	HP DL380P Gen8
2	VMWare to run on All 4 Primary servers above	01		
3	Work Station (PCs)		HP	
3.a	PC Workstation as per Spec.	12	HP	HP-PAVILLION 500-22-DT
3.b	Display Monitor 17"	21	HP	HP 20WD
4	UPS & Batteries			
4.a	20 KVA Online UPS for Control Room	02	NUMERIC	HP-MAX-20KVA
4.b	2 KVA Online UPS	36	NUMERIC	HP-MAX-2KVA
5	L3 Managed Switch	03	ALLIED TELEESIS	AT-X61024TS/X
6	L2 Switch 8 port with Poe	28	Allied Thelesis,D-Link,Tenda etc.	AT-IFS802SP/POE(W)-80
7	Videowall	01	BARCO	
7.a	LED as per specification 20*6,1980*1080 resolution	01	BARCO	4X2 MVL721
7.b	Controller for Video wall	01	BARCO	ECU-110
9	Server Grade Pc as specified for Display at CP/Addl.CP office	02	HP	HP-PROLIANT 380E Gen 8
10	Firewall	02	CISCO	
11	Fire Detection System & Suppression system			
11.a	Analog Addressable fire Alarm	01	HONEYWELL	XLS-200-1 LOOP

	Panel			
11.b	Multi Sensor Detectors	40	HONEYWELL	XLS-PHS
11.c	Manual Call point	05	HONEYWELL	XLS-278
11.d	Manual Abort	02	REPUTED	
11.e	Manual Release Station	02	REPUTED	
11.f	Isolators Modules	04	HONEYWELL	XLS-IM
11.g	Relay Output Device (Control Modules)	02	HONEYWELL	SIGA-CR
11.h	Hooter	06	HONEYWELL	XLS-GIR-HD
12	Fire Control			
12.a	80 Litre Cylinder/Valve Assembly	02	CHEMETRON	
12.b	FM200 Agent Filled in above Cylinder	01	DUPONT	
12.c	Discharge Nozzles	03	CHEMETRON	
12.d	Gas Release Panel	01	RAVEL	
12.e	Manifold with Pressure Switch	02	REPUTED	
12.f	Sounder with Strobe	02	AGNI/EQUI	
12.g	FM200 /NAF based Fire Extinguishers	02	CEASE FIRE	ABC Type
12.h	Accessories for Master Cylinder, solenoid actuator, Manual Actuator, discharge hos etc.	01	CHEMETRON	
12.i	Accessories for Slave Cylinder, pneumatic actuator, Pilot hose, Discharge hose etc.	01	CHEMETRON	
12.j	other Accessories like Cylinder strap, Warning signstickers, Sockets with	01	CHEMETRON	

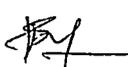
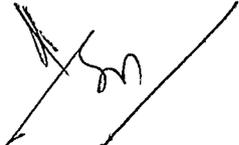
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	check valve etc.			
13	Water Leak detection System			
13.a	Water Leakdetection cable Sensor-10Mtr	05	SYNOPSISYS	CBL WDL
13.b	Water Leak Detection Panel for Controlling the above Module Cable sensor with TCP/IP interface - 08 Zone Panel.	01	JAY FIRE	
14	Access Control System- The main entrance door shall have fingerprint verification unit with proximity card for 50 Persons other doors to have proximity card-based access system for 100 or more member persons	00		
14.a	Application Software	01	HONEYWELL	EBI
14.b	Network Server	01	HONEYWELL	
14.c	Card Issue terminal - Pc	01	HP	
14.d	Controller -2 Door 2 Reader Controller	02	HONEYWELL	TS2
14.e	Proximity Card reader	02	HID	HID-I-CLASS R10
14.f	Finger print reader	01	HID	HID-BIO-CLASS
15	Closed Circuit television (CCTV) System-IP Based			
15.a	IP Based Fixed Lens Camera	08	HONEYWELL	HIDC-1300V
15.b	Indoor PTZ 10x	01	HONEYWELL	HDXFPWDCW
16	CCTV Surveillance Solution			
16.a	FHD IP Fixed Box/Bullet Type D/N Camera	##	HONEYWELL	HICC-2300T, HICC-2600T, HCW2G

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16.b	Full High-definition IPFixed Box/Bullet Type D/N Camera with Mounts and Accessories	##	HONEYWELL	
16.c	Outdoor Weather Proof Housing IP66 Rated	##	HONEYWELL	HHG-01S
16.d	Megapixel Varifocal lens 5 to 50 MM	##	HONEYWELL	GLM-D50V500CS
16.e	IP Based PTZ Surveillance Camera - FHD IP Speed dome Camera with 18X Optical Zoom (Day/Night) Inclusive lens, Mounts& weather Proof Housing Inclusive Separate Supply Adapter	12	HONEYWELL	HDZ20HDEX
17	Storage Devices			
17.a	Storage with Single or Dual active Quad core processors in power high availability mod, 48 GB RAM,SATA or SAS drive,Support RAID 0 raid 1, Raid 5/RAID6,Min 150 TB(usable) in RAID 6 Scalable to min 1 PB	01	HP	HP 4 GB 1RX4 PC3L
18	Network Accessories for Camera on each Junction			
18.a	Outdoor Enclosures at Junction Point to House switches,UPS,batteries other network accessories inclusive earthing(850X750X600)	30	REPUTED	
19	Pole For PTZ, FIX Camera,Outdoor Enclosures- MS Tubular hot dip galvanized,25 Feet Height,Dia.4 inch, with Necessary Foundation	73	JINDAL	
20	LAN Infrastructure & Accessories for CCTV System			

SL.      

20.a	Weather Proof Small Box (Holds Power adapter, Network Switch, LIU and Patch Cords) 600X600X300	36	REPUTED	
20.b	Passive Components and terminations.	01		
20.c	Server Rack-19*42U Rack	04	RITTAL	
20.d	Monitor ,15.2" with Keyboard & Mouse	01	HP	
20.g	Fibre Module - SMF, Wavelength :1310nm, 1.25b Gbps, distance:10 Km-28x2+2x4	01		
21	Licenses for Software			
21.a	Video Management Software	01	HONEYWELL	DVM
21.b	Command Center License	01	HONEYWELL	
21.c	Camera License for Camera Management	##	HONEYWELL	DVM
21.d	Alarm Management Software	01	HONEYWELL	EBI

(Signature)

(In the capacity of)

Duly authorized to sign the EOI Response for and on behalf of:

Sincerely,

[BIDDER'S NAME]

Name

Title

Signature

Date

Seal/Stamp of Bidder

 56

Appendix VI:

PRICE BID

That Bidder who meets the eligibility criteria should give supporting documents for technical evaluation and financial evaluation Consultants to Comprehensive Maintenance for CCTV based surveillance system in City of Bhubaneswaras per the detailed format given below.

Sl. NO.	Description	Make Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
	Comprehensive Maintenance (1 Year)						
1	On Site Support – CMC Charges for One Year	1	Year		18		
	# Preventive Maintenance by Bidder once in every 2 months to each installed location.						
	GRAND TOTAL						
	Grant Total (in words)						

Commissionerate Police Bhubaneswar – Cuttack may make necessary changes if felt appropriate based on the technical specification suggestion received from interested bidders and the price bid would be opened from those bidders who qualify the above-mentioned Pre-Qualification criteria.

Date:

(Seal/Stamp of Bidder)