BID DOCUMENT

EXPRESSION OF INTEREST

FOR

SUPPLY, INSTALLATION, COMMISSIONING AND COMPRESSIVE MAINTENANCE (1 YEAR)

FOR

INTEGELLIGENT SECURITY SYSTEM

IN

CITY OF ANGUL

NAME OF THE WORK:

Integelligent Security System

in City of Angul

The JM (Sambalpur)
Office of the Joint Manager,
The Odisha State Police Housing & Welfare Corporation Ltd.
At: J.N. Colony, R/94, Budharaja.

DATA SHEET

Serial No.	Items	Description
1	Company Name	**The Odisha State Police Housing & Welfare Corporation Limited (OPHWC)**
2	Address	**JM (Sambalpur)** Office of the Joint Manager, The Odisha State Police Housing & Welfare Corporation Ltd. At: J.N. Colony, R/94, Budharaja.
3	EOI Reference Number	001/OPHWC/JM,SBP/2018-19
4	Date of Issue of EOI	From 18/02/2019
5	Last Date for Submission of EOI Response	26/02/2019 up to 15:00 Hours
6	Presentation for qualified bidders	27/02/2019 at 11:30 Hours
7	Cost of EOI document	Rs. 5900 /-
8	EOI validity period	90 days from last date of submission of bid
9	Currency of EOI	Indian Rupees
10	Language of EOI	English
11	Website	www.ophwc.nic.in

The EOI document can be downloaded at the website mentioned above from 18/02/2019 to 25/02/2019 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 made in favour of **"Joint Manager, OSPH&WC, Ltd., Sambalpur"** and payable at **Sambalpur.**

Contents

DISCLAIMER

The Odisha State Police Housing & Welfare Corporation Limited (**OPHWC**) intends to select a select a Bidder for Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul. OPHWC 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 post installations. This document has been prepared based on available information in OPHWC and other publicly available documents, which OPHWC 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. OPHWC 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 OPHWC 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 OPHWC subsequent to the receipt of the responses are indicative only. OPHWC 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 OPHWC.

PROPRIETARY NOTICE

This document contains confidential information of OPHWC, which is provided for the sole purpose of permitting the recipient to evaluate the proposal submitted herewith. Inconsideration 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 OPHWC or becomes publicly known through no fault of recipient, from OPHWC or is received without obligation of confidentiality from a third party owing no obligation of confidentiality to OPHWC.

Expression of Interest

To

Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul.

About OPHWC:

The Odisha State Police Housing and Welfare Corporation Limited (OPHWC) was incorporated as a wholly owned Government of Odisha Company on 24th May 1980 under the Companies Act, 1956 to meet the housing needs of the Police with enhanced priority as a welfare measure.

During more than 35 years of its existence, the OPHWC has developed expertise in planning, designing and construction of residential and non-residential buildings for the Police, Fire Services, Prison Administration and Judiciary. The Corporation has developed expertise in fortifying buildings vulnerable to extremist attacks in Maoist affected areas of the State. The Corporation is the nodal agency for construction of buildings under important Central Government schemes like Modernization of Police Force Scheme, Security Related Expenditure Scheme and the Special Infrastructure Scheme.

The OPHWC as a trusted construction Company provides quality construction and therefore has attracted clients outside its core area of responsibilities. The Corporation has constructed projects for Colleges and Universities under UGC Grant, Hospitals for National Rural health Mission, Schools for SC & ST Development Department, and Vocational Training Institutes for Industries Department etc. Starting with a turnover of Rs. 13.70 Lakh in the year 1980-81, the Corporation has been able to post a figure of more than Rs. 400 Crores in the financial year 2016-17.

Applying the parameters as laid down in the criteria for categorization of PSUs the Government of Odisha has categorized the OPHWC as 'Silver' in the year 2011. The corporation also an ISO 9001:2015 certified Company.

OPHWC has identified Innovation as one of the key enablers in its modernization and productivity improvement drive and has decided to deploy integrated systems across the major functions of the organization to exploit the full potential of Technology.

Purpose of this EOI

The SP Office intends to install City surveillance solution involving setting up of IP based outdoor CCTV surveillance cameras across 14 locations in the city of Angul. The video surveillance data from various cameras deployed will be stored and monitored at the Command & Control center. This system shall also have the capabilities to get integrated with surveillance systems of different stakeholders with the objective of enhancing safety and security in the city.

- The purpose of Surveillance is to assist in and raise alarm to overcome the shortcomings in the security.

- Information obtained through video monitoring will be used exclusively for security, disciplinary and Public policy enforcement and/or law enforcement purposes.

- Video monitoring of the setup will be conducted in a manner consistent with all existing policies.

- Monitoring of suspicious people, vehicles, objects etc. with respect to protecting life and property in the city.

Based on the evaluation of EOI received, interested bidders found acceptable by OPHWC based on the technical and commercial selection criteria set out, will be short-listed and Work Order would be issued.

Typical following points have to be kept under consideration:

- Entry and Exit points of the City of Angul

- Approach Roads

- Each crossing set-up (location) to have 3-4 Cameras

- Prior to installation the design and location has to be approved by the committee formed for this project.

The Scope of Work

The Bidder has to Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul. The Locations that would be identified / proposed for CCTV camera installations should cover the entry and exit points to the city, and approaching roads in the respective installations, after taking confirmation from the committee formed to oversee the entire projects.

1. The bidder is required to conduct a detailed site survey for each identified installations and prepare a design, which has to be approved by the committee. The bidder shall submit the project plan that should include the following:

    a. Design and connectivity diagrams for all the locations, approved by the constituted committee.

    b. Design the do's and don'ts signage along with the following details:

        i. Installation Date

        ii. Warranty Date

        iii. Contact details for Complain registration

        iv. Terms for do's and don'ts

2. Potential bidder needs to arrange a project kick-off session with the respective committee to set the expectation before the start of the Installations.

3. Potential bidder needs to install 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 with prior arrangement at their own cost.

5. Potential bidder has to specify the hardware along with recommended brands, software (preference to Opens source analytics / OS), and Connectivity topology and submit the complete BOQ to execute the Project.

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

The Prequalification Process and General Conditions

The Procurement Process

The activities leading to Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul to overcome the shortcomings in the security at City of Angul.

Invitation for EOI: OPHWC invites System Integrators to submit Expression of Interest (EOI) for selection of well-established, experienced and innovative companies for Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul. A notice inviting for Expression of Interest has been published in leading daily newspapers and uploaded in OPHWC website www.ophwc.nic.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 OPHWC office. Two-part bid system shall be adopted, i.e., Techno-Commercial Offer and Price Offer.

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.

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 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, qualified bidders have to present the solution on 27/02/2019 at 11:30 hours, at D.P.O Angul under the chairmanship of the superintendent of Police, Angul.

Evaluation of the Proposals: The responses from bidders, who submit their technical proposals against the requirements of OPHWC 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 choose to be present) on the suitable date and time that will be inform later by telephone and e-mail.

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

Right to Terminate the Process:

- OPHWC 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 OPHWC. The bidder's participation in this process may result in OPHWC 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 OPHWC either to continue the activities or to culminate such activities with a definitive contract.

- OPHWC reserves the right to withdraw this EOI if it determines 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 OPHWC decides to go ahead with the process.

- OPHWC 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.

Authenticity of the Information and Right for Verification

- OPHWC 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 OPHWC shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the OPHWC there under.

- 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.

Additional Conditions

- Timing and sequence of events resulting from this EOI shall ultimately be determined by OPHWC

- Responses are subject to rejection if they limit or modify any of the terms and conditions or specifications of this EOI

- Neither the bidder nor any of bidder's representatives shall have any claims whatsoever against OPHWC 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 Corporation about selection of Vendors for issue of Prequalification applicants will be final. The Corporation 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 has not been blacklisted by any Central / State Government institutions / undertaking and there has been no 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 pending against the bidding Firm Or its Promoters Or its Directors Or its Executives. (To be furnished under Notarized Affidavit)

Amendment to bid documents:

- At any time, prior to the date of submission of bids, OPHWC 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 OPHWC Website and these amendments will be binding on them. Bidders are advised to visit OPHWC Website regularly for updates on this Tender.

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

Submission of Bids:

Only physical bids received by OPHWC office will be considered for opening. Bids sent through fax or email will not be considered.

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

a) **Technical Bid:** Envelope should subscribed "***Technical bid for Supply, Installation, Commissioning and Compressive Maintenance for Integelligent Security System in City of Angul***". 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 subscribed "***Financial bid for Supply, Installation, Commissioning and Compressive Maintenance for Integelligent Security System in City of Angul***" and it should contain the rates etc. as per [**Appendix VI**].

Delivery:

a) The successful bidder shall complete supplies strictly within the accepted delivery period. Material ordered by the OPHWC shall be delivered to destination securely packed as may be necessary.

b) The Equipment's shall have to be delivered and installed at respective locations to the satisfaction of concerned Authority.

c) Supply, installation, testing, commissioning of 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.

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 along with the equipment by the bidder.

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/P.O value issued by a schedule Bank from its branch in Bhubaneswar.

b) The proceeds of the Performance Security shall be payable to OPHWC 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 OPHWC after completion of the Contractor's obligations including any warranty obligations under the contract.

Warranty

a) The Bidder shall give warranty that the goods to be supplied shall be new and free from all defects and faults in material, workmanship, and manufacture and shall be of the highest grade and consistent with the established and generally accepted

standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings for **1 Year**.

b) The Bidder shall be responsible for any defects that may develop under the conditions provided by the contractor and under proper use, arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate contact protection, deficiencies in circuit design and or otherwise and shall remedy such defects at his own cost when called upon to do so by OPHWC who shall state in writing in what respect goods are faulty. This warrantee shall survive inspection or payment for, and acceptance of goods, after the goods have been taken over.

c) If it becomes necessary for the bidder to replace or renew any defective portion/portions of the equipment under this clause, the provisions of the clause shall apply to the portion/portions of equipment's replaced or renewed. If any defect is not remedied within a reasonable time, OPHWC may proceed to get the work done at the bidder's risk and expenses, but without prejudice to any other rights, which OPHWC may have against the bidder in respect of such defects.

d) The bidder, free of all charges at site including freight, insurance and other incidental charges, shall make replacement under warranty clause.

e) The equipment's offered shall confirm to the specifications as given in order and shall be guaranteed against defective design, defective quality material supplied, manufacturing defects etc., for a minimum period of 12 months from the date of supply of CCTV Camera.

f) The Bidders have the right to offer warranty more than the period of warranty offered by manufacturer of the product for 12 months from the date of supply of CCTV Camera and this aspect would certainly be taken into consideration.

Sub-Letting: The Bidder cannot assign or transfer and sub-contract its interest / obligations under the contract without prior written permission of OPHWC.

Liquidated Damages:

a) The date of the delivery of the goods/services stipulated in the acceptance of tender should be deemed the essence of the contract and the delivery must be completed not later than the dates specified therein. Extension in delivery period will not be given except in exceptional circumstances. Should, however, deliveries be made after expiry of the contract delivery period and accepted by the consignee, such deliveries will not deprive the bidder of the right to recover Liquidated Damages.

b) In case the bidder fails to supply the goods/services against the order, the same shall be procured from other Contractors at the cost and risk of the bidder and the excess money will be recovered from any dues of the party.

c) For late deliveries, as liquidated damages, a sum equal to 1% of the price of any goods/services not delivered or total order value in case where part delivery is of no use to a Purchaser, for a week or part of a week subject to maximum limit of 10% of the total order will be recovered from the bidder. OPHWC also reserves the right to cancel the order in such cases and forfeit the EMD/Performance Bank Guarantee and may debar the Contractor for future purchases.

d) LD can be recovered from any dues of bidder.

Warranty and Annual Maintenance Contract:

a) The entire CCTV System supplied and installed should be under onsite warranty of One years against all types of defects and deficiencies from the date of handing over of the system to SP office. Any defects found in the product/sub-product within the warranty period of 12 months shall be rectified / replaced by the bidder free of cost.

b) During this period of warranty, servicing at two months interval or earlier without any additional cost besides attending to call back services in case of break down shall be carried out free-of-cost. This includes replacement of parts and spare parts and any number of break down call.

c) Service in two months interval for each installed locations 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.

d) The warranty offered by Manufacturer, CCTV camera with all its accessories will be on 12 months and additional maintenance charges in anticipation of remote locations, and Bi monthly service, the bidders should quote the rate in price bid against maintenance charges, which shall be paid to the successful bidder on quarterly basis after deduction of applicable taxes.

e) AMC 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.

f) The comprehensive maintenance shall be carried our primarily at the premises of installation on all working days during office hours or even beyond office hours or on holidays depending upon exigency of work as and when so required. In case, the service provider feels that the equipment cannot be repaired at site, they will carry and deliver the equipment at their own cost and get it repaired within **48 hours**, failing which replacement shall be provided, **or an amount of Rs. 300 per day per CCTV** shall be payable as compensation. The bidder shall maintain proper service call sheets, which will be duly signed by the Engineer and the concerned official of the department.

g) 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.

h) Any contract that may result from this tender will be valid for a term of 1 Year (One Year) subject to the satisfaction of OPHWC. OPHWC 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.

i) OPHWC reserves the right to extend the term for a period of one year on mutually agreed terms and conditions subject to the OPHWC obligations at Law.

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.

Pre-Qualification Criteria for Systems Integrator

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

- 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 31.03.2018

b) The Bidder should get the MAF from OEM for the Cameras, Switch, Server, Fiber / Cat6.

c) The potential bidder must not be a consortium of firms.

d) The minimum average turnover of the <u>bidder shall be Rs. 1 Crore</u> (Rupees One Crore) for the last three years ending 31st March 2018 i.e., FY 2017-18, FY 2016-17, FY 2015-16.

e) Net worth of the bidder during the last financial year shall be positive as per audited balance sheet.

f) The potential <u>bidder / OEM</u> should have experience of having successfully completed similar works in PSU / Govt. / Govt. Affiliated Bodies during the last 5 years ending 31st March, 2018 as per either i) or ii) or iii) below:

    i. One similar work order projects in design, build, operation of IP Based CCTV Surveillance projects for minimum of 200 cameras.

OR

    ii. Two similar work order projects in design, build, operation of IP Based CCTV Surveillance projects for minimum of 150 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).

g) The potential <u>bidder / OEM</u> should have experience of having successfully completed similar works in Large scale enterprise during the last 5 years ending 31st March, 2018 as per either i) or ii) or iii) below:

    i. One similar work order projects in design, build, operation of CCTV Surveillance projects for which the cost of such work should not be less than Rs. 2.5 crores

OR

    ii. Two similar work order projects in design, build, operation of CCTV Surveillance projects for which the cost of such work should not be less than Rs. 1.5 crores

OR

iii.   Three similar work order projects in design, build, operation of CCTV Surveillance projects for which the cost of such work should not be less than Rs. 1 crores

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

h) 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 / OEM should be having its own Service Office in the state of Odisha since last Five years ending with 31.03.2018.

j) 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).

k) Bidder should have valid PAN No.

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

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 the 14 identified places where the CCTV surveillance has to be installed and maintained 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 **26/02/2019 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 "*Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul*". 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:

Activity	Tentative date for the Activity
Publication of Expression of Interest	18/02/2019
Last Date for Submission of EOI Response	26/02/2019 up to 15:00 hours
Opening of bid responses	26/02/2019 up to 16:00 hours
Presentation (Technically Qualified)	27/02/2019 at 11:30 hours

For further details and its operations, please visit OPHWC Website www.ophwc.nic.in

The response should be sent to the following address:

JM (Sambalpur)
Office of the Joint Manager,
The Odisha State Police Housing & Welfare Corporation Ltd.
At: J.N. Colony, R/94, Budharaja.
Email: jm_sambalpur@rediffmail.com

If the bidder requires further clarifications, an email may be sent to this email ID jm_sambalpur@rediffmail.com, for any queries on or before 20/02/2019. "[*Integelligent Security System in City of Angul - EOI Query*]" may be included in the subject line.

Appendix I:

Cover Letter from the System Integrator

Company letterhead

[Date]

JM (Sambalpur)
Office of the Joint Manager,
The Odisha State Police Housing & Welfare Corporation Ltd.
At: J.N. Colony, R/94, Budharaja.

Reference: Notice on Expression to Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul

Dear Sir,

This is to notify you that our company intends to submit a response to the EOI to Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul.

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 OPHWC 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 OPHWC in its short listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the short listing process or offering or accepting

unduly favors from our company in the short listing process, we are liable to be dismissed from the selection process or termination of the contract during the project. If selected to do so, for undertaking the project for Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul.

It is hereby confirmed that I / We are entitled to act on behalf of our corporation / company / firm / organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this   Day of   **2019**

(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

(Name and Address of Company)   Seal/Stamp of Bidder

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, certify that I am …………………...................………............. of the …………....................…, and that…………………………………………………………… who signed the above response is authorized to bind the corporation by authority of its governing body.

Date:

(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 2018		
Financial Turnover	**FY 2017-18**	
	FY 2016-17	
	FY 2015-16	
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	

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 Compressive 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.			

Appendix IV:

LITIGATION IMPACT STATEMENT

Company letterhead

[Date]

JM (Sambalpur)
Office of the Joint Manager,
The Odisha State Police Housing & Welfare Corporation Ltd.
At: J.N. Colony, R/94, Budharaja.

Reference: Notice on Expression to Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul

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 Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul.

(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

Appendix V:

Technical Specifications

SPECIFICATION FOR BULLET CAMERA -2 MP				
Sr No	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
	Camera			
	Sensor	1/2.8", progressive scan,2.0megapixel, CMOS		
	Lens	2.7~13.5mm，AF automatic focusing and motorized zoom lens		
	DORI Distance	Lens		
		2.7mm		
		13.5mm		
		Detect（m）		
		41.9		
		209.5		
		Observe（m）		
		16.7		
		83.8		
		Recognize（m）		
		8.4		
		41.9		
		Identify（m）		
		4.2		
		20.9		
	Angle of View(H)	121.36°~33.51		
	Angle of View (V)	58.4°~14.9°		
	Angle of View (O)	139.9°~33.4°		
	Adjustment angle	Pan: 0°~360°		
		Tilt: 0°~90°		
		Rotate: 0°~360°		
	Shutter	Auto/Manual, shutter time: 1~1/100000 s		
	Minimum Illumination	Colour: 0.001Lux (F1.2, AGC ON) 0 Lux with IR on		
	Day/Night	IR-cut filter with auto switch (ICR)		
	Digital noise reduction	2D/3D DNR		
	S/N	>52 dB		

		SPECIFICATION FOR BULLET CAMERA -2 MP		
Sr No	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
	IR Range	Up to 50m (164 ft) IR range		
	Defog	Digital Defog		
	WDR	120dB		
	Video			
	Video Compression	Ultra 265,H.265, H.264, MJPEG		
	H.264 code profile	Baseline profile, Main Profile, High Profile		
	Frame Rate	Main Stream:2MP (1920×1080): Max. 60fps; Sub Stream:720P (1280×720): Max. 30 fps; Third Stream:D1 (720×576): Max. 30fps;		
	9:16 Corridor Mode	Supported		
	HLC	Supported		
	BLC	Supported		
	OSD	Up to 8 OSDs		
	Privacy Mask	Up to 8 areas		
	ROI	Up to 8 areas		
	Motion Detection	Up to 4 areas		
	Smart			
	Behavior Detection	Intrusion, cross line, motion detection		
	Intrusion	Enter and loiter in a pre-defined virtual region		
	cross line	Cross a pre-defined virtual line		
	motion detection	Moving within a pre-defined virtual region		
	Recognition:	Face detection		
	Intelligent Identification	Defocus, Scene Change, Object Left, Object Moving		
	Statistical Analysis	People counting		
	General Function	Watermark, IP Address Filtering, Tampering Alarm, Alarm input, Alarm output, Access Policy, ARP Protection, RTSP Authentication, User Authentication		
	Audio			
	Audio Compression	G.711		
	Two-way audio	Supported		
	Suppression	Supported		
	Sampling Rate	8 KHZ		
	Storage			
	Edge Storage	Micro SD, up to 128 GB		

SPECIFICATION FOR BULLET CAMERA -2 MP

Sr No	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
	Network Storage	ANR		
	Network			
	Protocols	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, 802.1x, SNMP		
	Compatible Integration	ONVIF(Profile S, Profile G), API		
	Interface			
	Audio I/O	Input: impedance 35 kΩ; amplitude 1 V [p-p]		
		Output: impedance 600 Ω; amplitude 1 V [p-p]		
	Alarm I/O	1-In / 1- Out		
	Network	1 RJ45 10M/100M Base-TX Ethernet		
	Video Output	1 BNC, impedance 75 Ω; amplitude 1 V [p-p]		
	General			
	Power	12 V DC$\pm$25%, PoE (IEEE802.3 af)		
		Power consumption: Max 10W		
	Dimensions (L $\times$ W $\times$ H)	253.4 $\times$86$\times$71.7 mm (9.98" $\times$ 3.4" $\times$ 2.8")		
	Weight	1.0kg (2.2lb)		
	Working Environment	-35°C ~ +60°C (-31°F ~ 140°F), Humidity :10%~ 90% RH(non-condensing)		
	Ingress Protection	IP67		
	Vandal Resistant	IK10		
	Certificates	RoHS, UL,FCC,CE,CMMI-L5,ISO14001,ISO27001,ISO9001, UL, IP67,UL test Report,IP67 Lab Report,IK10		

SPECIFICATION FOR PTZ CAMERA-2 MP

Sr no	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
		Camera		
	Sensor	1/2.8", progressive scan, 2.0 megapixel, CMOS		

Sr no	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
		SPECIFICATION FOR PTZ CAMERA-2 MP		
	Lens	4.5 ~ 135.5 mm , AF automatic focusing and motorized zoom lens		
	Digital Zoom	16		
	Optical Zoom	30		
	DORI Distance	Lens		
		4.5mm		
		135.5mm		
		Detect(m)		
		69.8		
		2304.3		
		Observe(m)		
		27.9		
		921.7		
		Recognize(m)		
		14		
		460.9		
		Identify(m)		
		7		
		230.4		
	Angle of View (H)	62.67°~2.82°		
	Angle of View (V)	38.4°~1.3°		
	Angle of View (O)	77.1°~3.3°		
	Shutter	Auto/Manual; shutter time: 1~ 1/100000 s		
	Minimum Illumination	Colour: 0.001Lux (F1.6,AGC ON) 0 Lux with IR		
	Iris	Auto/Manual; F1.6 ~ F5.3		
	Day/Night	IR-cut filter with auto switch (ICR)		
	Digital noise reduction	2D/3D DNR		
	S/N	>52dB		
	IR Range	UP to 200m (656ft)		

SPECIFICATION FOR PTZ CAMERA-2 MP

Sr no	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
	Defog	Digital Defog		
	WDR	120Db		
	Video			
	Video Compression	Ultra 265,H.265, H.264, MJPEG		
	H.264 code profile	Baseline profile, Main Profile, High Profile		
	Frame Rate	Main Stream:2MP (1920×1080):Max. 60 fps;		
		Sub Stream:2MP (1920×1080):Max. 60 fps;		
		Third Stream: D1 (720×576): Max. 60 fps		
	HLC	Supported		
	BLC	Supported		
	EIS	Supported		
	OSD	Up to 8 OSDs		
	Privacy Mask	Up to 24 areas		
	ROI	Up to 8 areas		
	Motion Detection	Up to 4 areas		
	Smart			
	Behavior Detection	Intrusion, cross line, motion detection, Auto tracking		
	Intrusion	Enter and loiter in a pre-defined virtual region		
	cross line	Cross a pre-defined virtual line		
	motion detection	Moving within a pre-defined virtual region		
	auto tracking	Tracking the specified target		
	Recognition:	Face detection、 Audio detection		
	Intelligent Identification	Defocus, Scene Change, Object Left, Object Moving		
	Statistical Analysis	People counting		
	General Function	Watermark, IP Address Filtering, Tampering Alarm, Alarm input, Alarm output, Access Policy, ARP Protection, RTSP Authentication, User Authentication		

SPECIFICATION FOR PTZ CAMERA-2 MP

Sr no	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
	Audio			
	Audio Compression	G.711		
	Two-way audio	Supported		
	Suppression	Supported		
	Sampling Rate	8 KHZ		
	Storage			
	Edge Storage	Micro SD, up to 128 GB		
	Network Storage	ANR		
	Network			
	Protocols	Ipv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UpnP, HTTP, HTTPS, SMTP, 802.1x, SNMP		
	Compatible Integration	ONVIF(Profile S, Profile G), API		
	Pan & Tilt			
	Pan Range	360° (endless)		
	Pan Speed	0.1°/s ~ 240°/s		
		Preset speed: 300°/s		
	Tilt Range	−15° ~ +90° (auto reverse)		
	Tilt Speed	0.1° ~ 160°/s		
		Preset speed: 240°/s		
	Number of Preset	1024		
	Patrol	Preset patrol, route patrol, recorded patrol		
	Home Position	Supported		
	Interface			
	Audio I/O	Audio cable		
		Input: impedance 35 Kω; amplitude 2 V [p-p]		
		Output: impedance 600 Ω; amplitude 2 V [p-p]		
	Alarm I/O	1-Feb		
	Serial Port	1 RS485		
	Network	1 RJ45 10M/100M Base-TX Ethernet		
	Video Output	1 BNC, impedance 75 Ω; amplitude 1 V [p-p]		
	General			
	Power	24 V AC (Default) ±25%, 24 V DC±25%		
		Power consumption: 11~47W		
	Dimensions(ØxH)	Ø227x359.4 mm (Ø8.9" x 14.2")		

SPECIFICATION FOR PTZ CAMERA-2 MP

Sr no	General Specification	Technical Specification	Compliance (Yes / No)	Deviation if any
	Weight	5.5 kg (12.1 lb)		
	Working Environment	–40°C ~ +70°C (-40°F ~ 158°F), Humidity:10%~ 95% RH(non-condensing)		
	Ingress Protection	IP66		
	Vandal Resistant	IK10		
	Reset Button	Supported		
	Certifications Mandatory	ISO 14001, ISO270001, ISO9001,UL,RoHS, CE,FCC, Enviromental Test Report,BIS		

Unified Operation Platform (UOP)

No.	Description	Compliance (Yes/No)	Product Documentation Reference
1	The Unified Security Platform (UOP) shall be an enterprise class IP-enabled application solution. The UOP shall support the seamless unification of various City-wide smart elements IP video management system (VMS), IP automatic license plate recognition system (ALPR), Digital Message Sign boards (V(D)MS), Emergency response system. under a single platform. The UOP user interface (UI) applications shall present a unified security interface for the management, configuration, monitoring, and reporting of various embedded systems and associated edge devices.		
2	The UOP platform must be a true unified management experience for city infrastructure, simplifying control room operation and system integration, minimizing total cost of ownership, and increasing operational efficiency critical to rapid decision-making.		
3	The UOP Platform shall maximize real-time monitoring and control efficiency from one workstation through the synchronized control of high-resolution blueprints, images, streaming camera data, and system alerts which allows for interaction between all relevant data		
4	Allows simple and accessible Integration with other independent control systems through a single Unification point with consistent user interface and better operational efficiency.		
5	UOP shall be open architecture based, highly scalable and able to integrate multiple disparate systems seamlessly on a common platform		
6	UOP system shall provide a real time Common Operating Picture (UOP) of the area involving all agencies using a simple Operator / User friendly interface.		

No.	Description	Compliance (Yes/No)	Product Documentation Reference
	Unified Operation Platform (UOP)		
7	The system shall support various sensors like Cameras, GPS, Voice devices, Storage devices, Sensor inputs from other Utility applications/ systems		
8	The UOP platform shall provide a dashboard functionality to manage workflows by integrating information from different agencies and systems to facilitate responsive decision making in City.		
9	The UOP platform should provide a cross-agency collaboration tool to support instant communication between various user groups and authorities.		
10	**UOP Architecture** a) The Application shall be an IP enabled solution. All communication between the servers and other clients shall be based on standard TCP/IP protocol and shall use TLS encryption with digital certificates to secure the communication channel. b) The Application shall protect against potential database server failure and continue to run through standard off-the-shelf solutions. c) The Application shall support up to one thousand instances of Clients connected at the same time. However, an unrestricted number of Clients can be installed at any time d) The Application shall support an unrestricted number of logs and historical transactions (events and alarms) with the maximum allowed being limited by the amount of hard disk space available. e) The UOP Application shall support native and off the-shelf failover options without any dependency on external application for both Hardware and Application level fail over. f) The UOP application solution should provide operators and managers with a management dashboard that provides a real time status and is automatically updated when certain actions, incidents and resources have been assigned, pending, acknowledged, dispatched, implemented, and completed. The above attributes shall be color-coded. g) The UOP application shall improve scalability for large and geographically distributed environments. h) The UOP application must provide a uniform, coherent, user-friendly and standardized interface for all the other modules / applications getting unified on the platform. i) It shall be possible to combine the different views onto a single screen or a multi-monitor workstation. n) The UOP application system should generate Notification, Alert and Alarm messages that should be		

	Unified Operation Platform (UOP)		
No.	**Description**	**Compliance (Yes/No)**	**Product Documentation Reference**
	visible within the Dashboard and Mobile App if required		

11	**Alarm management: Should Support the following functionality**
	    a) Create and modify user-defined alarms. An unrestricted number of user-defined alarms shall be supported.
	    b) Assign a time schedule or a coverage period to an alarm. An alarm shall be triggered only if it is a valid alarm for the current period.
	    c) Set the priority level of an alarm and its reactivation threshold.
	    d) Define whether to display live or recorded video, still frames or a mix once the alarm is triggered.
	    e) Provide the ability to display live and recorded video within the same video tile using picture-in-picture (PiP) mode.
	    f) Provide the ability to group alarms by source and by type.
	    g) Define the recipients of an alarm. Alarm notifications shall be routed to one or more recipients. Recipients shall be assigned a priority level that prioritizes the order of reception of an alarm
	    h) The workflows to create, modify, add instructions and procedures, and acknowledge an alarm shall be consistent for various systems.
	    i) The UOP shall also support alarm notification to an email address or any device using the SMTP protocol.
	    j) The ability to create alarm-related SOP. The SOP shall be user-defined.
	    k) The user shall can acknowledge alarms, create an incident upon alarm acknowledgement, and put an alarm to snooze.
	    l) The user shall be able to spontaneously trigger alarms based on something he or she sees in the UOP system Dashboard.		

12	**Operating Procedures Module:** Should have inbuilt SOP framework and configuration tool to create and modify the SOPs. System should provide tool to define/create any event/rule based Standard Operating Procedure (SoP) for decision making by optimizing the time to resolution for emergency and crisis situations.		
13	Reporting 1. The UOP shall support report generation (database reporting) for various systems Unified into the platform ALPR and video		

Unified Operation Platform (UOP)			
No.	**Description**	**Compliance (Yes/No)**	**Product Documentation Reference**
	2. The workflows to create, modify, and run a report shall be consistent for all systems.		
	3. The UOP shall support the following types of reports:		
	❖ Alarm reports		
	❖ Video-specific reports (archive, bookmark, motion, and more).		
	❖ Configuration reports.		
	❖ ALPR-specific reports (mobile ALPR playback, hits, plate reads, reads/hits per day, reads/hits per ALPR zone, and more).		
	❖ System Health activity and health statistics reports for proactive maintenance.		
	❖ Generic Reports, Custom Reports and Report Templates		
	4. The platform should have capability to provide access to real time data and historical for reporting and analysis the user shall be able to customize the predefined reports and save them as new report templates. There shall be no need for an external reporting tool to create custom reports and report templates. Customization options shall include setting filters, report lengths, and timeout period. The user shall also be able to set which columns shall be visible in a report. The sorting of reported data shall be available by clicking on the appropriate column and selecting a sort order (ascending or descending).		
	5. The UOP shall support comprehensive data filtering for most reports based on entity type, event type, event timestamp, custom fields, and more.		
	6. The user shall be able to click on an entity within an existing report to generate additional reports from the Monitoring UI.		
	7. The UOP shall support the following actions on a report: print report, export report to a PDF/Microsoft Excel/CSV file, and automatically email a report based on a schedule and a list of one or more recipients.		
	8. Reporting function is part of command and control dashboard visualization tool. It shall provide information about status of the command and control on managing the security incidents across the locations. Reporting function should enable operator to create reports in either graphical format or flat tabular format. Reports shall be created automatically or manually by operator whenever required. The reports should be generated and exported as a Microsoft word excel format or an acrobat format by operator.		
	9. Reporting function is part of command and control dashboard visualization tool. It shall provide		

No.	Description	Compliance (Yes/No)	Product Documentation Reference
	information about status of the command and control on managing the security incidents across the locations. Reporting function should enable operator to create reports in either graphical format or flat tabular format. Reports shall be created automatically or manually by operator whenever required. The reports should be generated and exported as a Microsoft word excel format or an acrobat format by operator.		

Unified Operation Platform (UOP)

S/N	SPECIFICATION	Compliance (Yes/No)	Remarks
1	The facial recognition system (FRS) targeted by this specification must be able to identify multiple persons of interest in real-time & recorded videos, through leading-edge face recognition technology. The solution must be able to perform in a crowd, on the move, and at a distance, with enrolment on the fly.		
2	The system shall have an application module which makes it possible to search for a specific subject in one or various recorded videos, existing database & from previous detections at speeds faster than real-time up to 5x-12x.		
3	The system shall make use of the latest technologies such as AI & Deep learning with a series of latest GPUs from respective OEMs and not discontinued products.		
4	The system shall make use of the stream computing paradigm of the latest GPUs to the limit by performing multiple stages of the face recognition pipeline in parallel. It must efficiently exploit cache hierarchies of both GPUs and CPUs to greatly improve the computational performance in crowded environments.		
5	The system shall have the best-suited technology employed for 1: N (one to many) matching application when they enter the field of view of CCTV cameras.		
6	The system shall be a truly open & independent solution module and not embedded in any NVR or VMS.		
7	The algorithm of the system shall be able to recognize partial faces with varying angles (up to 40 degrees either horizontal or vertical) & any facial accessories/ hair (glasses, beard, and expressions).		

The heading row "Facial Recognition System Specification/Compliance Sheet" spans the table above.

	Facial Recognition System Specification/Compliance Sheet		
S/N	SPECIFICATION	Compliance (Yes/No)	Remarks
8	The system shall be able to broadly match a suspect/criminal photograph with a database created using photograph images database available with respective authorities. Initial database is required to register 10000 subjects.		
9	The system should be able to detect multiple faces (up to 100 faces per second) & compare a face against a database with the comparison speed of 35 million in less than a second.		
10	The system should have an inbuilt or external tool to synthetically generate rotated views of the face from a single partial image of the suspect face.		
11	The system shall be able to broadly match a suspect/criminal photograph with a database created using photograph images database available with Authorities & Local Police. Initial database is required to register 10,000 subjects.		
12	The system shall have the capacity to create different categories of people with the option to customize the matching threshold for different categories.		
13	The software must allow the enrolment of subjects from standard image formats, such as JPEG, PNG, or BMP.		
14	The system should be compatible with any make of cameras & support the latest compressions technology & resolutions (e.g. H.265, 4K & 8K).		
15	The user interface of the system should be user-friendly & have a report management tool without the installation of any additional client software. It should be able to generate real-time different reports in different file formats.		
16	The system should register raised events in relational databases complying with the SQL standard, such as PostgreSQL, Oracle or MSSQL.		
17	The system should have ready to serve a mobile app for Alarm monitoring and cross-check the identity of any suspect.		
18	It should be open to further integration opportunities, enabling external integrators to incorporate tailored software modifications or additions on demand. For the same, the bidder has to provide free API, SDK of the system.		

	Facial Recognition System Specification/Compliance Sheet		
S/N	**SPECIFICATION**	**Compliance (Yes/No)**	**Remarks**
19	The Face Recognition Algorithm vendor should have participated in the latest NIST (National Institute of Standards and Technology, U.S.) evolution, Face in Video Evaluation (FIVE) report.		
20	Face Recognition Algorithm shall have False Negative Identification Rate (FNIR) with Rank-1 (R=1), shall be less than or equal to 20% with High Near Field of view criteria in Sports Arena dataset type (Non- Cooperative) with N = 480 of latest NIST Report (Face In Video Evaluation).		
21	The FRS system should be proven and must be deployed on 03 such crowed intense projects in India, the bidder must have to submit the details of such projects and contact person details to cross-check the performance of the deployed system.		

	Specification Solid Cable Category 6 UTP Armoured 4 PAIR		
SL. No.	**SPECIFICATION / QUALITATIVE REQUIREMENT**	**Compliance (Yes / No)**	**Remark**
1	The 4 pair UTP cable shall Armored Outdoor Cable type		
2	This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801		
3	UV resistance outer sheath		
4	Inner Sheath Flame Retardant (IEC60332-1)		
5	Rugged Double sheath construction and Suitable for Outdoor application		
6	RoHS Complaint		
7	ECCS Tape armouring provides Excellent Mechanical protection		
8	Construction: 4 twisted pairs separated by internal PE Cross Separator. Full separator. Half shall not be accepted..		
9	Conductor: 23 AWG		
10	Insulation : HDPE, nominal diameter; 1.05mm		

11	Inner Sheath: PVC (0.40mm Min. Thickness) & Diameter over inner sheath - 6.5 mm (max.)
12	ECCS Tape Armouring Diameter over Armour - 8.5 mm (nom.)
13	Outer Sheath: Polyethylene, Colour: Black, Diameter over outer Sheath -10. +/- 0.5mm
14	Conductor Resistance @20°C : Max. 93.8 Ω/KM
15	Conductor Resistance Unbalance: Max. 5 %
16	Mutual Capacitance @1KHZ : Max 56 nF/KM
17	Insulation Resistance : Min. 5000 MΩ.km
18	High Voltage : 2.5KV DC/1 min
19	Capacitance Earth Unbalance: Max. 3300 pF/km
20	Propagation Delay : Max. 570, 545, 538 & 536 ns/100 m @ 1 MHz, 10 MHz, 100 MHz & 250 MHz
21	Propagation Dalay Skew : Max. 45 ns/100 m 1-250 MHz
22	Characteristic Impedance : 100 ± 15Ω (1-100MHz)
23	Temperature Range : -40°C up to +70°C
24	Bending Radius : 12 x Diameter (min.)
25	Pulling Force : 11.5 kgs (max.)
26	Temperature Range : -40°C up to +70°C
27	Marking Medium : Ink Jet Printing in contrasting Colour
28	Category 6 UTP cables shall Supports Gigabit Ethernet (1000 base-T) standard

Specifications For SM Optical Fiber Cable & Accessories. DRAWER TYPE LIU – RACK MOUNT		
SL No	**Characteristic Minimum Required Specification**	**Compliance (Yes/No)**	**Remarks**
1	Min. 6 Port Configuration Available in Standard 19"		
2	6/12/24/48 Ports Adapter Interface available from day one without any adapter plates.		
3	Consist of Top Cover and Bottom Panel		
4	Easy to Assemble and Dissemble		
5	Three Types of Input Holes		
6	Cable Entry Through Water Proof Cable Clamp		

	Specifications For SM Optical Fiber Cable & Accessories. DRAWER TYPE LIU – RACK MOUNT		
SL No	**Characteristic Minimum Required Specification**	**Compliance (Yes/No)**	**Remarks**
7	Splice Max 48 Fibers		
8	Patch Cord with Bend Radius Guides Minimize Macro Bending		
9	Install 6 Cable Management Rings Inside to Ensure Flexibility		
10	Comprehensive Accessory Kits for Cable Entry and Fiber Management		
11	Dimensions (mm) : 430 X 220 X 1U		
12	Body Material : SPCC Black Powder Coating		

	Specifications For SM Optical Fiber Cable & Accessories. Optical Fibre SM Adaptor		
SL No	**Characteristic Minimum Required Specification**	**Compliance (Yes/No)**	**Remarks**
1	**Features** SC/LC/FC adaptors should be Simplex and duplex type. Telcordia GR-326-Core. RoHS Compliance Low Insertion and Return Loss Adapters should have compact design & high precision		
2	Telcordia, TIA/EIA, IEC compliance		
3	**Insertion Loss** <= 0.20 db for Zirconia Sleeve Durability (1000 Mattings): <= 0.2db Main Body Material : PBT/ABS		
4	**Sleeve/Ferrule Withdrawal Force** SC / FC Adapter 2.0N ~ 5.9N , LC Adapter-1.0N ~ 2.5N		

	Specifications For SM Optical Fiber Cable & Accessories. DRAWER TYPE LIU – RACK MOUNT		
SL No	**Characteristic Minimum Required Specification**	**Compliance (Yes/No)**	**Remarks**
1	**Features** LSZH Jacket-Reduced Toxic Gasses Emitted During Combustion 100% Factory Tested Low Insertion Loss and Return Loss Available with Corning Fiber Available in PC/APC Type Options High Precision Ceramic Ferrule with Good Concentricity SC/LC/FC options		

SL No	Characteristic Minimum Required Specification	Compliance (Yes/No)	Remarks
	Specifications For SM Optical Fiber Cable & Accessories. **DRAWER TYPE LIU – RACK MOUNT**		
2	**Technical Specifications:**	**Compliance (Yes/No)**	**Remarks**
3	Connector Type : SC, ST, FC, LC, MTRJ Fiber Type : OS2 (9/125 Corning Clear Curve) Tight Buffer Color : White/yellow Tight Buffer Material : LSZH Tight Buffer Diameter (mm) : 0.9 +/- 0.05 Strength Member : Aramid Yarn Jacket Color : Yellow for OS1/OS2 Jacket Material : LSZH Jacket Thickness (mm) : 0.45 +/- 0.05 Cable Diameter (mm) : 2.9(+/-0.1) X 5.9(+/-0.2) Cable Weight (kg/km) : Approx. 13.0 Minimum Bending : 30 (static) Radius (mm) Attenuation (db/km) : <= 1.5 at 1300nm, <= 3.5mm at 850nm Short Term Tensile (n) : 160 Crush Resistance (n/100mm) : 500 Operation Temperature : Minus 20 ~ Plus 70 (degree)		
4	**Optical Specifications**	**Compliance (Yes/No)**	**Remarks**
5	Insertion Loss : <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db Return Loss : PC>= 45db, UPC>=50db, APC>=60db		
6	**Mechanical Specifications**	**Compliance (Yes/No)**	**Remarks**
7	Connector Ferrule : Ceramic, (MTRJ: PS Polyphenylene Sulphide) Apex Offset : <50μm Fiber Height : (+/-)100nm End Face Radius of Curvature : 7mm <R<25mm(Excluding MTRJ) Repeatability : <= 0.2db 1000 Times Mating Cycles Working Temperature : (minus 40 Degree ~ Plus 85 Degree) Storage Temperature : (minus 40 Degree ~ Plus 85 Degree)		

Optical Fiber Patch Cord, Single Mode (OS2), LSZH Types 1/2/3 Mtrs		
Features LSZH Jacket-Reduced Toxic Gasses Emitted During Combustion. Simplex and Duplex Options 100% Factory Tested Low Insertion Loss and Return Loss Available with Corning Fiber Available in PC/APC Type Options High Precision Ceramic Ferrule with Good Concentricity SC/LC/FC options		
Technical Specification	**Compliance (Yes/No)**	**Remarks**
Connector Type : SC, ST, FC, LC, MTRJ Fiber Type : OS2 (9/125 Corning Clear Curve) Tight Buffer Color : White/yellow Tight Buffer Material : LSZH Tight Buffer Diameter (mm) : 0.9 +/- 0.05 Strength Member : Aramid Yarn		
Jacket Color : Yellow Jacket Material : LSZH Jacket Thickness (mm) : 0.45 +/- 0.05 Cable Diameter (mm) : 2.9(+/-0.1) X 5.9(+/-0.2) Cable Weight (kg/km) : Approx. 13.0 Minimum Bending : 30 (static) Radius (mm) Attenuation (db/km) : <= 1.5 at 1300nm, <= 3.5mm at 850nm Short Term Tensile (n) : 160 Crush Resistance (n/100mm) : 500 Operation Temperature : Minus 20 ~ Plus 70 (degree)		
Optical Specifications	**Compliance (Yes/No)**	**Remarks**
Insertion Loss : <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db Return Loss : PC>= 45db, UPC>=50db, APC>=60db		
Mechanical Specifications	**Compliance (Yes/No)**	**Remarks**
Connector Ferrule : Ceramic, (MTRJ: PS Polyphenylene Supplied) Apex Offset : <50μm Fiber Height : (+/-)100nm End Face Radius of Curvature : 7mm <R<25mm(Excluding MTRJ) Repeatability : <= 0.2db 1000 Times Mating Cycles		

Specification For Single Mode (OS2) Unitube ADSS ,6 Core Cable		
Specification	**Compliance (Yes/No)**	**Remarks**
Mechanical Specifications		
Jacket Material — UV Stabilized HDPE-Black-Anti Tracking Sheath		
Type of Jelly — Thixotropic Jelly		
Strength Member — High Strength Glass Rovings & FRP's		
Fiber Count — 12F		
Outer Diameter (mm) — 9.0 +/- 0.5		
Nominal Cable Weight (kg/km) — 65		
Tensile Strength test (IEC 60794-1-2-E1) — 1700 N		
Crush Load (IEC 60794-1-2-E3) (N/100mm) — 2000 N		
Bend Radius (IEC 60794-1-2-E11/IEC 60794-1-2-E6)		
Operating Temperature — Minus 20°C to Plus 60°C		
Storage Temperature — Minus 40°C to Plus 60°C		
Single Mode (OS2) Cable Characteristics		
Fiber Type — ITU - G.652D		
Coating / Cladding Diameter (μm) — 245 ± 7.0 / 125 ± 0.7		
Wavelength (NM) — 1310/1550		
Attenuation Max. (dB-KM) — 0.36 / 0.22		
Refractive Index — 1.4674/1.4679		
ADSS Characteristics		
Span Length — Up to 70 meters		
Installation Sag — 1% of Span Length		

Specification For Single Mode (OS2) Unitube ADSS ,6 Core Cable			
Specification		**Compliance (Yes/No)**	**Remarks**
Wind Speed	100 km per hour		

Specifications For Network Switch & Accessories.			
Feature	**Specification**	**Compliance (Yes / No)**	**Remarks**
Hardware Architecture	24 ports 10/100/1000Base-T		
	The Switch must support USB ports for storage, support NMS		
	The equipment shall support 24*10/100/1000 Giga + 4*10GE SFP+ ports		
	The proposed Switch shall support high switching capacity of at least 128 Gbps non-blocking.		
	The proposed Switch shall support high packet transfer rate of at least 95 Mpps with 64 bytes per packet.		
Layer 2	The Switch must support up to 16K MAC address tables		
	The Switch must suppor Mac-based,Port-based, protocol- based, and IP subnet-based VLAN assignment		
	The Switch must support VLAN Translation		
	The Switch must support the IEEE 802.1ad (Q-in-Q) standard		
	The Switch must support at least 4K active VLAN		
	The Switch must support Private VLAN		
	The Switch must support voice VLAN or equivalent		
	The equipment must support loop detection		

Specifications For Network Switch & Accessories.			
Feature	**Specification**	**Compliance (Yes / No)**	**Remarks**
	The Switch must support Jumbo Frames at least 10K bytes		
	The equipment must support stacking feature		
	The Switch must support standard ring protocol ITU.T G.8032		
	The Switch must support any ring protocol which can support less than 50ms		
	The equipment must support Port aggregation such as LACP		
Layer 3	The equipment must support static route,RIPv1/v2, OSPF		
	The equipment must support ECMP		
	The equipment must support IPv4/IPv6 dual stack		
	The equipment must support IPv6 over IPv4 tunnel, 4over6 tunnel		
	The equipment must support VRRP		
	The equipment must support BFD for VRRP,OSPF		
	The equipment should support BGP		
Multicast	The equipment must support IGMP proxy		
	The equipment must support IGMP snooping		
	The equipment must support MLD snooping v1/v2		
	The equipment must support up to 1K multicast routing entries		
	The equipment must support PIM DM, PIM SM, PIM SSM		
	The equipment must support IGMPv1/v2/v3		

Specifications For Network Switch & Accessories.			
Feature	**Specification**	**Compliance (Yes / No)**	**Remarks**
	The equipment must support GVRP		
QOS	The equipment must support ingress and egress traffic shaping and VLAN based		
	traffic limit		
	The equipment must support queuing algorithms, such as SP, WRR, SP+WRR		
	The equipment must support port mirroring		
Security	The equipment must support bidirectional ACL		
	The equipment must support port-based ACL,VLAN-based ACL		
	The equipment must support CPU defence		
	The equipment must support the DAI (Dynamic ARP Inspection) feature		
	The equipment must support DHCP Snooping feature		
	The equipment supports the IP Source Guard feature		
	The equipment must support port-based network access control according to IEEE 802.1x standard		
	The equipment should support MAC Authentication		
Network O&M	The equipment must support web management		
	The equipment must support SNMPv1/v2c/v3, Telnet, RMON, SSHv2		

Specifications For Network Switch & Accessories.			
Feature	**Specification**	**Compliance (Yes / No)**	**Remarks**
	The equipment must support automatic configuration		
	The equipment must support usb-based deployment		
	The equipment must support sflow function		

Specification For Access Level L2 Industrial PoE Switch		Compliance (Yes/No)	Remarks
Hard Ware	Number of Ethernet ports		8 Giga PoE ports & 4 Giga SFP ports
	Front panel Design		Front panel Cable Installation
	LED		Flat LED panel
	IP Level		IP30
	Din-Rail Mount		Support
	Wall Mount		Support
	Fanless Design		Fanless
	MTBF		>250000 HR
Performance	Number of MAC Addresses		8K
	Backplane		24 Gbps
	Line Speed		1Gb/s
Power	24 VDC		12~58VDC
	220 VAC		Support
	PoE Power Budget		240 Watt
	PoE standard		All ports are IEEE 802.3af & IEEE 802.3at
	Power Consumption		10Watt
	Dual power input		Support
Temperature Range	Operating Temp.		-40 ~ 75℃
	Storage Temp.		-40 ~ 85℃
	Humidity		5~95%, Non Condensing
Redundant Function	High Speed Redundant Ring		Protected Ring

Specification For Access Level L2 Industrial PoE Switch		Compliance (Yes/No)	Remarks
	Redundancy Protocol		RSTP/STP/MSTP/Protected Ring
	Daisy Chain		Support
	Balancing Chain		Support
	Ring Coupling		Support
	Dual-Ring		Support
	Dual-Homing		Support
Operating Interface	Web interface		Support
	Internet Explorer		Support
	Telnet interface		Support
	RS232 Console		Support
	RS232 Console Type		CLI
	CLI		Support
	Windows Utility		Windows Utility
	SNMP		SNMP V1/V2C/V3
	RMON		RMON 1, 2, 3, 9
Software Functions	STP		Support
	RSTP		Support
	MSTP		Support
	IPv6		Support
	LLDP		Support
	SNMP V1/V2C/V3		SNMP V1/V2C/V3
	Industrial Protocols Supported		Profinet, Modbus/TCP
	RMON		Support
	SNMP Inform		Support
	Port Mirror		Support
	VLAN/GVRP		Support
	Rate Limiting		Support
	ACL		Support
	VCL		Support
	QCL		Support
	MLD		Support
	LACP		Support
	Static Port Trunk		Support
	IGMP Snooping/GVRP		Support

Specification For Access Level L2 Industrial PoE Switch		Compliance (Yes/No)	Remarks
	RADIUS/IEEE 802.1X		Support
	Broadcast storm protection		Support
	Multicast/Unicast storm port		Support
	QoS (CoS/ToS/Diffserv)		Support
	Https/SSL		Support
	SSH		Support
	Ping Command		Support
	BOOTP/DHCP		Support
	DHCP Option 82		Support
	Line-swap fast recovery		Support
	Set Device IP		Support
	Port Lock		Support
	Accessible IP address		Support
	Loop protection		Support
Upgrade Software Functions	RS232 Console upgrade		Support
	Web Browser upgrade		Support
Alarm	E-mail Alarm		Support
	Relay Out (Digital Output)		Support
	SNMP Trap		Support
	SNMP Inform		Support
	Event Trigger		Support
	Event Log		Support

(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

Appendix VI:

List of all the 14 identified places

Serial No.	LOCATION	Bullet Camera	PTZ Camera
1	Inside Thana	0	1
2	Thana Chowk	4	
3	Huluru Singh Chowk	3	
4	Gandhi Marg Chowk	3	
5	Hemsur Para Chowk	4	
6	Sikhakpara Chowk	3	
7	Gita Grama Chowk	4	
8	Raj Hotel Chowk	4	
9	Hata Chowk	4	1
10	Mishrapara Chowk	3	
11	Hari Mahuri Chowk	4	
12	Bazar Chowk	4	1
13	Central Lodge Chowk	3	
14	Municipality Chowk	4	
Total Cameras		**47**	**3**

(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

Appendix VI:

PRICE BID

That Bidder who meet the eligibility criteria should give supporting documents for technical evaluation and financial evaluation Consultants to Supply, Installation, Commissioning and Compressive Maintenance (1 Year) For Integelligent Security System in City of Angul as per the detailed format given below.

Sl. NO.	Description	Make	Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
(A)	**CAMERA & Display**							
1	UL Listed 2MP Star Light Motorized Verifical Camera Day/ Night Fixed Camera, IP 67 with PoE supported.		31	Nos				
2	UL LISTED 2MP 30X Optical Zoom Star Light PTZ Camera ,H.265/ H.264/ MJPEG triple stream encoding, 50/60fps, @1080p (1920*1080), IP 67with PoE supported		9	Nos				
3	Joy Stick for PTZ camera		1	Nos.				
4	43" Professional Display		2	Nos				
5	HDMI Cable		6	Nos				
(B)	**RACK**							
6	37U 800 X 1000 MM Rack network Rack with PDU, FAN, Cable Manager & Tray.		1	Nos.				

Sl. NO.	Description	Make	Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
7	6U Out Door Cabinet with PDU, FAN & accessories. (Dust &water IP 55 Rated).		9	Nos.				
(C)	**Switch**							
8	L3- 24 Port Fully Managed Giga Switch with 4 SFP port		1	Nos.				
9	L2 -24 Port Fully Managed Industrial grade 8 Port Giga PoE+ Switch with 4 SFP Port.		9	Nos.				
(D)	**Transceiver Module**							
10	1000 Base1310nm SM Transceiver Module		22	Nos.				
(E)	**Passive Items**							
11	OFC -6 Core-SM-TYPE- ADSS		10000	MTR.				
12	LIU Loaded 24 PORT-Industrial Standard		11	Nos.				
13	OFC SM Pigtail		156	Nos.				
14	OFC SM SC-LC Patch Cord		20	Nos.				
15	CONDUIT & HDPE PIPE-32MM		1000	MTR.				
16	OUT DOOR UTP CABLE BOX		5	Nos.				

Sl. NO.	Description	Make	Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
17	Wireless Key Board Mouse		1	SET				
18	UPS SYSTEM - 1 KVA online UPS		9	Nos.				
19	UPS SYSTEM -5 KVA online UPS		1	Nos.				
20	Constant Earthing Stabilizer Earthing voltage will be zero in output Socket at One point.		8	Nos.				
	CCTV Poles							
21	CCTV Galvanized Pole /Mast with Foundation		9	Nos.				
	VIDEO ANALYTICS & COMMAND & CONTROL SOFTWARE							
	FRS (Facial Recognition Software)							
22	Face Recognition Software Bio Surveillance Next - Simultaneous Search (Live license per Camera)		5	Nos.				
23	DB500 (Max. Number of subjects 500) - (License for Project).		1	Nos.				
24	Intel Xeon processor with 12 physical cores, 3.2 GHz or better, At least, 32GB RAM or better, SAS HDD, 10TB, 7200 RPM., Nvidia GTX 1080 TI 11GB or better, GbE network interface card., CD/DVD-RW., Microsoft Windows 8/10 64-bit Edition		1	Nos.				

Sl. NO.	Description	Make	Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
	Unified Communication Command & control Software							
25	Command and control Security Centre Software which includes: 1 Directory, 5 Security Desk client connections (incl. Web Client), Plan Manager Basic, Alarm Management, Advanced Reporting, System Partitioning, Zone Monitoring, IO Modules Support, Email Support, Macros Support, Support for server virtualization, all supported languages. Access control, video, or LPR content respectively.		1	Nos.				
26	1 Failover Directory Role. Only available with Enterprise packages		1	Nos.				
27	Enterprise Package which includes: Archiving and Auxiliary Archiving support, Media Router, Audio, Remote Security Desk, Camera Sequences, Camera Blocking, Camera DE warping, Hardware Matrix Support, Time Zone, Edge recording, trickling and archive transfer, Keyboard and Joystick Support, Max. 300 cameras per Archiver / 100 cameras on the Directory machine.		1	Nos.				
28	camera connection		41	Nos.				

Sl. NO.	Description	Make	Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
29	Failover camera connection		41	Nos.				
30	SDK connection for Bio Surveillance Face Recognition (FRS)		1	Nos.				
	Genetec Advantage							
31	Genetec™ Advantage for 1 Omnicast Enterprise Camera – 3 years		41	Nos.				
	(C) Security Center AutoVu - License Plate Recognition							
32	GSC AutoVu™ Standard Package. Includes Security Center Mapping for 5 client connections		1	No.				
33	Black AutoVu SharpV Camera Kit which includes: SharpV Long Range Dual (LPR and Context) lens and 850nm illuminator, mounting bracket and Sharp Camera Connection (POE+ Required. Cable not included)		5	Nos.				
	(D) Genetec Advantage							
34	Genetec™ Advantage for 1 AutoVu fixed camera connection - 3 Years		5	Nos.				
	Server & Storage							
35	High End Rack mountable server with Redundant power supply and Original Microsoft Software License.		2	No's				
36	NAS Storage For 30 Days Recording with Raid 0/1/5/6/10 Facility.		1	No				

Sl. NO.	Description	Make	Quantity	UOM	Base Rate (Rs.) (Approx.)	Tax (%)	Rate Including Tax (Rs.)	Amount (Rs.)
37	Work Station with Original Microsoft Windows License.		3	Nos				
	Sub Total							
	PART –B (Installation Part)							
38	Commissioning of the complete system, Training and Maintenance for 1 Year		1	L/sum		18		
	Sub Total							
	PART –C (Support CAMC)							
39	On Site Support- CAMC Charges for 2nd Year		1	Year		18		
40	On Site Support- CAMC Charges for 3rd Year		1	Year		18		
	# Preventive Maintenance by Bidder once in every 2 months to each installed location. **# The CAMC cost for 2nd and 3rd year would not be considered for Financial evaluation**							
	Sub Total							
	GRAND TOTAL = PART A + PART B							
	Grant Total (in words)							

OPHWC 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.

Note#

The No. of Installations locations estimated is 14, and may vary as per actual present site condition.

CAMC is optional, and may be extended based on performance of 1st year, and would not be considered in evaluation

Date:

(Seal/Stamp of Bidder)