

OCAC invites Request for Proposal (RFP) for selection of Agency for implementation of Smart Surveillance System in Registration Offices of IGR, Odisha, Cuttack. For details please visit websites <u>www.ocac.in</u> & <u>www.odisha.gov.in</u>. The bid shall be submitted in electronic mode only in the portal <u>https:// enivida.odisha.gov.in</u> latest by 31.05.2023, 3.00 PM. OCAC reserves the right to accept/ reject any/ all bids without assigning any reason thereof.

General Manager(Admin), OCAC, Plot No.-N-1/7-D, Acharya Vihar, P.O.-RRL, Bhubaneswar-751013, Ph.-2567280/ 2567064/ 2567295 Request for Proposal for Supply, Installation, Commissioning & Maintenance of CCTV Surveillance System for e-Registration Project of Revenue and Disaster Management Department Government of Odisha

# RFP Enquire No.: OCAC-SEGP-MISC-0012-2023-23035



Odisha Computer Application Centre (Technical Directorate of I.T. Department, Government of Odisha) N-1/7-D, Acharya Vihar, P.O. - RRL, Bhubaneswar - 751013 EPBX: 674-2567280 / 2567064 /2567295 / 2567283 Fax: +91-674-2567842 Website: www.ocac.in

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# DISCLAIMER

The information contained in this Tender document or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by Odisha Computer Application Centre (OCAC) or any of their employees is provided to Bidder(s) on the terms and conditions set out in this Tender Document and such other terms and conditions subject to which such information is provided.

This Tender is not an agreement and is neither an offer nor invitation by the OCAC to the Bidders or any other person. The purpose of this Tender is to provide interested parties with information that may be useful to them in making their technical and financial offers pursuant to this Tender (the "Bid"). This Tender includes statements, which reflect various assumptions and assessments arrived at by the OCAC in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This Tender may not be appropriate for all persons, and it is not possible for the OCAC, to consider the technical capabilities, investment objectives, financial situation and particular needs of each party who reads or uses this Tender. The assumptions, assessments, statements and information contained in this Tender, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations, studies and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this Tender and obtain independent advice from appropriate sources.

Information provided in this Tender to the Bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. OCAC accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

OCAC, makes no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Tender and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender or arising in any way in this Bid Stage. OCAC also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this Tender.

OCAC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Tender. The issue of this Tender does not imply that OCAC is bound to select a Bidder or to appoint the Preferred Bidder, as the case may be, for the Project and OCAC reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

OCAC reserves all the rights to cancel, terminate, change or modify this selection process and/or requirements of bidding stated in the Tender, at any time without assigning any reason or providing any notice and without accepting any liability for the same.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by OCAC or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and OCAC shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

# **Definitions / Acronyms**

Term	Definition
	Agreement to be signed between the successful bidder and OCAC,
	including all attachments, appendices, all documents incorporated
Agreement	by reference thereto together with any subsequent modifications,
	the tender, the bid offer, the acceptance and all related
	correspondences,
	clarifications, presentations.
Authorized Representative	Any person authorized by either of the parties
	Any firm offering the solution(s), service(s) and /or materials
	as required in the tender. The word Bidder when used in the pre-
Bidder	award period shall be synonymous with parties bidding for this
	tender, and when used after award of the contract shall mean
	the successful party with whom OCAC, signs the agreement for
	rendering of services
	for implementation of this project.
OEM	Original Equipment Manufacturer
Party	Means OCAC or Bidder, individually and "Parties" mean OCAC and
	Bidder, collectively
	The Pre-Qualification, Technical and Commercial proposals all
Proposal / Bid	together, i.e., complete proposal for the implementation of this
	Project

# Tender Notice / Bidding Data Sheet

RFP Enquire No.: OCAC-SEGP-MISC-0012-2023-23035

Dated 10/05/2023

Tender Notice		
Request for Proposal for		
Supply, Installation, Commissioning & Ma	intenance of CCTV Surveillance System for	
e-Registration Project of Revenue an	d Disaster Management Department	
Governmer	nt of Odisha	
Item	Date & Time	
Availability of Bid Document in the website	10-05-2023 To 31-05-2023 at 03:00 PM	
(www.ocac.in, www.odisha.gov.in, and		
www.enivida.odisha.gov.in)		
Last date for receiving pre-bid queries	16-05-2023, By 3.00 PM	
through e-mail: gm_ocac@ocac.in with a		
copy to bibhuti.ojha@ocac.in &		
chandan.pradhan@semt.gov.in		
Pre-Bid Conference	18-05-2023, at 1.00 PM	
Last date and time for Submission of Bid	31-05-2023 by 3.00 PM	
Opening of General/ Pre-Qualification and	31-05-2023 by 4.00 PM	
technical Bids		
Opening of Commercial Bids	To be informed	
EMD	₹50,00,000/- (Fifty Lakh Only)	

## **1** Fact Sheet

Clause Reference	Description
Method of Selection	Least Cost Selection Evaluation (LCS) shall be used to select the bidder. The bidder is required to submit the bids General (Pre-Qualification), Technical & Financial bid in eNivida portal (https://enivida.odisha.gov.in). Financial bid of those bidders who qualify in Pre-Qualification & Technical Bid shall be opened. The proposal with the L1 price shall be selected.
Document Download	Tender document can be downloaded from <u>http://www.ocac.in,</u> <u>www.odisha.gov.in,</u> and www.enivida.odisha.gov.in . The bidders are required to pay the tender document fee of <b>₹11,200/- (inclusive GST)</b> in the electronic mode in e-Nivida Portal. Bidder may also furnish the DD in favor of Odisha Computer Application Centre payable at Bhubaneswar. The RFP document fee can also be transfer online through NEFT only to Union Bank of India, Account Number 149319900000195, IFSC Code - UBIN0814938, Acharya Vihar Branch, Bhubaneswar, Account Name Odisha Computer Application Centre. In case of NEFT online transfer of RFP Document fee, the firm must mention the Firm Name, Amount Transfer with Transaction ID, Tender Enquire Number, GST No to the mail.
Earnest Money Deposit (EMD)	The bidder must have submitted the EMD of ₹50,00,000/- (Rupees Fifty Lakh Only) in the shape of Demand Draft (DD) from any Nationalized/Scheduled Commercial Bank in favor of Odisha Computer Application Centre (OCAC) payable at Bhubaneswar. The EMD should be valid for a minimum period of 90 days from the last date of submission of the Bid. Bidder should upload the scan copy of the DD online and submit the original DD at OCAC office on or before 01/06/2023, 6.00 PM.
SoW	This project is linked to deliverables relating to supply, installation & commissioning of CCTV Surveillance system and peripherals and provide maintenance support within stipulated time.
Pre-Bid Meeting	A pre-Bid meeting will be held on 18-05-2023, at 1.00 PM. All the queries must be received on or before 16-05-2023, By 3.00 PM , through e-mail only to gm_ocac@ocac.in with copy to bibhuti.ojha@ocac.in & chandan.pradhan@semt.gov.in

Proposal Validity	Proposals must remain valid till <b>180 days</b> from the last date of submission of the bids.
Bid Submission	Bidders must submit the bids online through e-Nivida portal.
	Proposals must be submitted in e-Nivida Portal (www.enivida.odisha.gov.in) on or before <b>31.05.2023 By 3.00 PM</b>

## 2 Background Information

#### 2.1 Basic Information

- I. Odisha Computer Application Centre (OCAC) invites responses from system integrators who meet the minimum eligibility criteria as specified in this bidding document for "Supply, Installation, Commissioning & Maintenance of CCTV Surveillance System for e-Registration Project of Revenue and Disaster Management Department, Government of Odisha" as described in Section 10 of this Tender, "Scope of Work/ Terms of reference".
- II. Proposals must be received not later than time, date and venue mentioned in the Fact Sheet. Proposals that are received after the dateline WILL NOT be considered in this procurement process.

#### 2.2 Project Background

The e-Registration Project is implemented for providing computerised Registration of Deeds in all the Registry Offices in the state of Odisha in PPP mode. It aims to continue and improve the current computerised services being offered at the 205 Registration Offices (future offices also included under the scope) in all the 30 districts of the state to provide citizens of Odisha with a faster, simpler and more cost-effective service.

The System Integrator for Supply, Installation, Commissioning & Maintenance of CCTV Surveillance Systems will be selected in a transparent manner through a competitive bidding process following the procedures stipulated in the Odisha Government Procurement Policy and Rules thereon. The selected bidder shall be responsible to provide on-site warranty and operation & maintenance support for the five years for all supplied items at sub-registrar offices, District Control Room and State Control Room. The list of detailed Offices and scope of work is mentioned in Section 5 of this RFP.

#### 2.2.1 Objective of the Project

The key objectives of the project are to:

- ✓ Create a safer and more productive working environment.
- ✓ Increase accountability, transparency and reduce grievances.

- ✓ Improve incident response time.
- ✓ Improve citizen connect through better service delivery.
- ✓ Provide informed decision making.
- ✓ Utilize current infrastructure more efficiently.
- ✓ Restrict unauthorized access at premises

#### 2.3 About Department

Odisha Computer Application Centre, the Designated Technical Directorate of Electronics and Information Technology Department, Government of Odisha, has evolved through years as a center of excellence in IT solutions and e-Governance. It has contributed significantly to the steady growth of IT in the state. The IGR Office has requested Electronics and Information Technology Department of to select System Integrator for Supply, Installation, Commissioning and Maintenance of CCTV Surveillance Systems for e-Registration Project. The CCTV Surveillance Systems shall be implemented at different Registration Offices across the state.

## **3** Instruction to Bidder

#### 3.1 Issuance of RFP and Address for Bid Document Download and Submission

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal e-Procurement system on the Home Page at www.ocac.in, www.odisha.gov.in, and www.enivida.odisha.gov.in.

Bidder may download the tender document free of cost from the e-Procurement portal www.ocac.in, www.odisha.gov.in, and www.enivida.odisha.gov.in.

#### **3.2** Pre-Requisite for Online Bidding

In order to bid online on the portal <u>www.enivida.odisha.gov.in</u>, the user desktop/machine must be updated with the latest Java & DSC setup. The link for downloading latest java applet & DSC setup are also available on the Home page of the e-tendering Portal.

## **3.3** Cost of Bidding Document

Tender document can be downloaded from the website www.ocac.in, www.odisha.gov.in, and www.enivida.odisha.gov.in.The bidders are required to submit the tender document Fee of ₹11,200/- electronically through e-Nivida portal or by Demand Draft in favour of "Odisha Computer Application Centre "and payable at Bhubaneswar from any of the Nationalized scheduled commercial bank along with the Proposal. Proposals received without or with inadequate tender Document fees shall be rejected.

## 3.4 Earnest Money Deposit or Bid Security

The Bidders shall furnish, Earnest Money Deposit (EMD) of ₹50,00,000/- (Rupees Fifty Lakh Only). The EMD Fee shall be submitted:

- In form of Demand Draft (DD) in favour of "Odisha Computer Application Centre "and payable at Bhubaneswar from any of the Nationalized scheduled commercial bank along with the Proposal. Proposals received without or with inadequate tender Document fees shall be rejected.
- The EMD shall be forfeited in following circumstances.
  - If a Bidder withdraws the Proposal or increases the quoted prices after opening of the Proposal and during the Bid validity period or its extended period, if any.
  - In case of a successful Bidder, if the Bidder fails to sign the Agreement in accordance with Terms & Conditions (including timelines for execution of the Agreement) of this tender or fails to furnish Performance Bank Guarantee in accordance with the Terms & Conditions (including timelines for furnishing Performance Bank Guarantee)
  - If a Bidder withdraws its bid during the period of bid validity.
  - During the Bid process, if a Bidder indulges in any act that would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
  - If a Bidder has been found to have indulged in any suppression of facts, furnishing of fraudulent statement, misconduct, or other dishonest or other ethically improper activity, in relation to this tender
  - If a Bidder's proposal contains deviations, conditional offers and partial offers.

## 3.5 Cost of Proposal

The Bidder shall bear all costs associated with the preparation and submission of its bid and Department shall in no event be held responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

## 3.6 Submission of Bids

Three bid system will be followed for this RFP with Least Cost Selection Evaluation (LCS) method. The three bids are Eligibility/Pre-Qualification Criteria, Technical Bid and Financial Bid. All bids must be prepared as per format provided in annexures. All pages of bids must be sequentially numbered and must contain the list of contents with page number. Any deficiency in the documentation may result in rejection of the bid. If bidder fails to submit bid online within given time then bid shall be rejected.

The bidder shall take into account any corrigendum published to this RFP document that may have been published before submission of the proposal.

#### 3.7 Mode of Bid Submission

The bidder has to submit the bid electronically in e-Nivida System at www.enivida.odisha.gov.in.

#### 3.8 Bid Formats

Proposal must be direct, concise and complete. Department shall evaluate the proposal based on the clarity and directness of its response to the requirements of the project as outlined in this RFP.

Bidder shall submit the proposal in the format prescribed in following sub-sections. Bids not in the format shall be liable for rejection. If a format for specific documents not provided in this RFP, the document shall be submitted in the format that makes it legally valid/binding on the bidder and that is acceptable to the purchaser. In any event, the Purchaser shall have the right to ask for clarifications, modifications etc. on the document submitted by the Bidder and the Bidder shall be obliged to provide such clarifications and modifications within timelines specified by the Department/Purchaser.

#### **3.8.1** Pre-Qualification Bid Formats

Documents / Items	Details
Pre-Qualification Checklist	As per Annexure-I
Undertaking /Bid Cover Letter	As per Annexure-II
Bidder's Profile	As per Annexure-III
Pre-Qualification Criteria	PQ/Eligibility Criteria Table and supporting
	documents referring the page

Power of Attorney/Letter of Authorization	<ul> <li>Power of Attorney/LoA executed by the bidder in favor of authorized signatory signing the bid</li> <li>Or Copy of Board Resolution</li> <li>Power of Attorney/LoA executed by bidder</li> </ul>
Self-Declaration Regarding non-blacklisting	As per Annexure – IV
Undertaking on Total Responsibility	As per Annexure – V
No deviation Certificate	As per Annexure – VI

## 3.8.2 Technical Qualification Bid Formats

Documents / Forms / Items	Details
Technical Proposal Letter	As per Tech Form-I
Technical Evaluation Check List / Project Citation Format	As per Tech Form-II
Un Priced BoM	As per Tech Form III
Proposed Solution	Detailed Proposed Solution complying all the requirement as mentioned in this RFP – Tech Form IV
Proposed Work Plan	As per Tech Form V
Team Composition	As per Tech Form VI
Curriculum Vitae (CV) of Key Personnel	As per Tech Form VII
Manufacturer Authorization Form (MAF) from all OEM	As per Tech Form-VIII
Compliance Sheet for Technical Proposal	As per Tech Form-IX

	(The bid shall be rejected if cost of any item is shown in the technical proposal)
Detailed Specification and Data Sheets of all equipment/items proposed including licenses	Properly highlighted and mapped with RFP requirement

#### 3.8.3 Financial Bid Formats

The Bidder must submit the Commercial Bid is the formats specified in "Commercial Bid Format" provided in this RFP. The Bidders shall give the required details of all applicable taxes, duties, other levies and charges etc. in respect of provision of services under this RFP.

Prices quoted by the Bidder shall remain firm during the entire contract period and shall not be subject to variation on any account except change in tax rates and tax laws. A Bid submitted with an adjustable price quotation will be treated as non-responsive and shall be rejected.

#### 3.9 Pre-Bid Meetings & Queries

OCAC shall hold a pre-bid meeting with the prospective bidders as per the tentative calendar events at OCAC office.

The Bidders will have to ensure that their queries for Pre-Bid meeting should reach as per below given format (in Excel .xls format) by email as per the date and time mentioned in the Bidding Details section.

The queries should necessarily be submitted in the following format:

<b>S.</b>	RFP Document	Content of RFP requiring	Points of	Remarks or
No.	Reference(s)	Clarification(s)	Clarification	Justification
	(Section & Page Numbers)		1	
			Suggestions	

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

#### **3.10** Response to Pre-Bid Queries

- a) OCAC will endeavor to provide timely response to all valid queries. However, OCAC makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does OCAC undertake to answer all the queries that have been posed by the bidders.
- b) At any time prior to the last date for receipt of bids, OCAC may, for any reason, modify the tender Document by a corrigendum.
- c) The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the websites www.ocac.in, <u>www.odisha.gov.in</u>, <u>www.enivida.odisha.gov.in</u> as per the tentative calendar events
- d) Any such corrigendum shall be deemed to be incorporated into this tender.
- e) In order to provide prospective Bidders reasonable time for taking the corrigendum into account, OCAC may, at its discretion, extend the last date for the receipt of Proposals.

#### 3.11 Language of Bids

The Bids prepared by the Bidder and all subsequent correspondence and documents relating to the bids exchanged by the Bidder and OCAC, shall be written in English language. Any printed literature furnished by the Bidder, written in another language, shall be accompanied by an accurate English translation, in which case, for purposes of interpretation of the bid, the English translation shall govern.

#### 3.12 Amendment of RFP Document

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

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

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

#### 3.13 One Proposal Per Bidder

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

#### 3.14 Inspection of Site and Sufficiency of Tender

Bidders are expected to work out their own rates based on the detailed description of scope of work items, the specifications, SLA conditions, etc. and should judiciously arrive at the commercials. The Bidders shall be deemed to have satisfied themselves before bid submission as to correctness and sufficiency of its Tender. The rates and prices quoted shall cover all its obligations under the contract necessary for proper completion and maintenance of the Works/Services.

If necessary, before submitting its bid the Bidder should inspect and examine various sites and its surroundings and shall satisfy itself about form and nature of the Sites (existing SROs/DROs, SDC, proposed site location & site condition etc.), means of access to the site, and in general, obtain all necessary information which may influence or affect project implementation and operationalization. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

## 3.15 Use & Release of Bidder Submissions

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

#### **3.16 Compliant Proposal**

The Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the Bid shall be deemed to have been done after careful study and examination of this RFP document with full understanding of its implications.

Failure to comply with the requirements of this paragraph may render the Proposal noncompliant and the Proposal may be rejected. Bidders must;

a. Submit all documents as specified in the RFP

b. Comply with all the requirement as specified in this RFP

The Bids shall be submitted strictly in accordance with the requirements and terms & conditions of this RFP. The Bidder shall submit a No Deviation Certificate as per the format mentioned in this RFP document. The bids with deviation(s) are liable to be rejected.

#### 3.17 Limitations on Promotions

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

#### 3.18 Total Responsibility

Bidder should submit undertaking on total responsibility for the defect free operation of the proposed solution as per the format provided in RFP under Annexure section.

#### **3.19** Conditional Offers by the Vendor

The bidder shall abide by all terms and conditions specified in the RFP Document. Conditional offers shall be liable for dis-qualification.

#### **3.20** Deadline for Submission of Proposals

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

#### 3.21 Late Proposal Submission

The e-procurement portal www.ocac.in, <u>www.odisha.gov.in</u>, <u>www.enivida.odisha.gov.in</u> will not accept any proposal post the deadline date & time. Physical or Manual submission of proposals shall not be entertained after the deadline.

#### 3.22 Modification and Withdrawal of Bids

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

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

## 3.23 Bid Validity/Proposal Validity

Proposals shall be valid for a period of 180 days (one hundred and eighty days) from the date of submission of the proposals. A Proposal valid for shorter period may be considered as non-responsive. In exceptional circumstances, at its discretion, OCAC may solicit the bidder's consent for an extension of the validity period. The request and the responses thereto shall be made in writing or by fax or email.

#### **3.24 Address for Communication**

Bidder may use address below for any further communication w.r.t. this Tender. All the information about the opening or corrigendum etc. shall also be uploaded at website i.e. www.ocac.in, www.odisha.gov.in, www.enivida.odisha.gov.in

<General Manager (Admn.)>

Odisha Computer Application Centre (OCAC)

(Technical Directorate of I.T. Department, Government of Odisha) N-1/7-D, Acharya Vihar, P.O. - RRL, Bhubaneswar - 751013

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EPBX: 674-2567280 / 2567064 /2567295 / 2567283
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Fax: +91-674-2567842

## 3.25 Presence of Bidder

The bidders may send their authorized representative in the bid opening process. Information relating to the examination & clarification may be sought from the Bidder at the time of prequalification and technical evaluation. However, the client reserves the right to not share the comparative analysis of proposals to the bidders until the award to the successful Bidder has been announced.

#### **3.26** Correction of Errors

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

Arithmetic errors in bids will be corrected as follows:

- ✓ Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- ✓ Where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate will govern unless, in the opinion of department, there is obviously a gross error such as a misplacement of a decimal point, in which case the line item total will govern.
- ✓ The amount stated in the tender form, adjusted in accordance with the above procedure, shall be considered as binding, unless it causes the overall tender price to rise, in which case the bid price shall govern.

#### **3.27** Opening of Proposal

Offers received within the prescribed closing date and time will be opened in presence of bidder representatives (who choose to attend the opening of tender), on the date, time & at the address as per the Bidding Data Sheet. The vendor's representatives present shall sign a register of attendance.

The dates for opening of Technical Proposal would be communicated subsequently, as and when the Prequalification Proposal scrutiny is completed. Bidders would be given sufficient notice to make technical presentation with respect to the Evaluation Framework and their proposed solution.

#### 3.28 Clarification on Proposal

To assist in the scrutiny, evaluation and comparison of offers, OCAC may, at its discretion, ask some or all bidders for clarifications with regards to their offer. The request for such clarifications and the response will necessarily be in writing (by letter / fax / email). Failure of a Bidder to submit additional information or clarification as sought by OCAC within the prescribed period will be considered as non-compliance and the proposal may get evaluated based on the limited information furnished along with the bid proposal.

#### 3.29 Rejection/Disqualification

#### 3.29.1 General Rejection Criteria/Disqualification

The bid is liable to be disqualified if:

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

#### 3.29.2 Technical Rejection Criteria/Disqualification

- I. Bidders not meeting the eligibility criteria defined in the RFP
- II. Revelation of prices in any form before opening of the commercial bid
- III. Failure to furnish all information required by the tender document or submission of a bid not substantially responsive to the Tender Document in every respect.
- IV. Bidders not quoted for complete scope of work as indicated in the tender documents, addendum (if any), and any subsequent information given to the Bidder.
- V. Bidder not complying with the Technical and General terms and condition of the RFP
- VI. Bidder not confirming the unconditional acceptance of full responsibility of providing services in accordance with the scope of work and service level agreements of this tender.

#### 3.30 Taxes & Duties

Bidders shall be entirely responsible for payment of all taxes on as per actuals. The Bidders shall fully familiarize themselves about the applicable domestic taxes (such as GST or income taxes, duties, fees, levies, etc.) on amounts payable by the Purchaser under the resultant Agreement. All such taxes must be included by Bidders in the final cost offered to OCAC.

#### 3.31 Right to Vary the Scope at the Time of Award

- ✓ OCAC reserves its right to make changes to the scope of the work at the time of execution of the resultant Agreement. If any such change causes an increase or decrease in the cost of, or the time required for the bidder's performance of any part of the work under the resultant Agreement, whether changed or not changed by the order, an equitable adjustment (if required) shall be made in the Contract Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the bidder for adjustment under this Clause must be asserted within thirty (30) days from the date of the Bidder's receipt of the changed order from OCAC.
- Repeat orders for extra items or additional quantities may be placed on the rates and conditions given in the contract. Delivery or completion period may also be proportionately increased.

#### **3.32 Fraud & Corrupt Practices**

OCAC requires that bidder observe the highest standards of ethics during the entire process of tendering and during execution of the contract. In pursuance of this policy, OCAC defines, for the purpose of this provision, the terms set forth as follows:

- **"Corrupt practice"** means the offering, giving, receiving or soliciting of anything of value to influence the action of OCAC in contract executions.
- **"Fraudulent practice"** means a misrepresentation of facts, in order to influence a procurement process or the execution of a contract, to OCAC, and includes collusive practice among bidders (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive OCAC of the benefits of free and open competition.
- **"Unfair trade practices"** means supply of services different from what is ordered on, or change in the Scope of Work which is given by the OCAC in RFP.
- **"Coercive Practices"** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of contract.

OCAC shall reject the bid proposal for award of contract, if it determines that the bidder recommended for award, has been found to have been engaged in corrupt, fraudulent of unfair

trade practices. Once the contract is signed and if it is noticed that the Bidder has indulged into the Corrupt / Fraudulent / Unfair /Coercive practices, it will be a sufficient ground for the department for termination of the contract and initiate black-listing of the vendor.

## 4 Bid Evaluation Criteria

#### 4.1 Bid Evaluation Process

- I. Consortium Bidding is not allowed
- II. OCAC will constitute a Proposal Evaluation Committee to evaluate the responses of the bidders
- III. The Bidding process shall be online using eNivida portal www.ocac.in, www.odisha.gov.in, www.enivida.odisha.gov.in
  . The Evaluation Committee(s) constituted by OCAC shall evaluate the bids submitted online by the bidders for compliance
- IV. The Proposal Evaluation Committee constituted by the OCAC shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection
- V. The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of evaluation with the Committee
- VI. Evaluation Committee will first open Pre-Qualification
- VII. The proposal documentation furnished by the bidders shall be examined prima facie, to ensure that the proposal has been properly prepared, signed and accompanied by relevant documents criteria (cover letter, authorization/Power of Attorney in favour of bid signatory, other requisite details etc.) to substantiate the compliance with the criteria as explained above.
- VIII. In order to assist in the examination, evaluation and comparison of Bids, OCAC may at its discretion ask the Bidder for a clarification regarding its Bid. The clarification shall be given in writing, but no change in the price or substance of the Bid shall be sought, offered or permitted
  - IX. OCAC reserves the right to ask for a technical elaboration/clarification in the form of a technical presentation from the Bidder on the already submitted Technical Proposal at any point of time before opening the Financial Proposal. The Bidder shall furnish the required information to OCAC and its appointed representative on the date asked for, at no cost to OCAC.
  - X. Bidders for this contract will be assessed in accordance with the Least Cost Selection Evaluation (LCS) method. All bids will primarily be evaluated on the basis of Pre-

Qualification & Technical Criteria. The Proposal Evaluation Committee will carry out a detailed evaluation of the Proposals. Only those bidders who qualify in Pre-qualification & Technical Bid will be qualify for financial bid opening. Financial bids of only those bidders shall be opened who qualify in Technical Bid by scoring 70% or above.

- XI. In order to determine whether the technical aspects are in accordance with the requirements set forth in the RFP Documents, the Proposal Evaluation Committee (Tender Committee) will examine and compare the technical aspect of the Proposals on the basis of information provided by the bidder, considering the following factors:
  - a. Overall completeness and compliance with the requirement
  - b. Proposed solution, work-plan and methodology to demonstrate that the bidder will achieve the performance standards within the time frame described in RFP documents.
  - c. Any other relevant factors, if any, listed in the RFP document or OCAC deems necessary or prudent to take into consideration.
  - d. In order to facilitate the technical proposal evaluation, the technical criteria laid down along with the assigned weights have been presented in subsequent sections. The marking scheme presented here is an indication of the relative importance of the evaluation criteria. Bidders securing a minimum of 70% marks in the technical evaluation will only be considered for further financial bid evaluation. Bidders', who don't secure the minimum, specified technical score will be considered technically non-responsive and hence debarred from being considered for financial evaluation. Recommendation of the Proposal Evaluation Committee (Tender Committee) shall be final in this regard.
  - e. Pre-qualification and Technical Evaluation will be based on the documents provided by the bidder. The Bidder who will fulfill all the criteria for the Prequalification as mentioned in this RFP will be shortlisted for Technical Evaluation. Technical Evaluation will be based on the marking criteria as mentioned in this RFP.

#### 4.2 Pre-Qualification Criteria

The Bidder should meet the following Eligibility Criteria and should enclose the mentioned documentary proof in Technical Bid.

S. No.	Criterion	Supporting Documents to be
		Submitted

Bidder'	s General Details	
1	The bidder should be a company registered under Companies Act, 1956./Proprietorship Firm /Partnership Firms Registered under limited liability Partnership Act 2008/Partnership Firm Registered under Indian Partnership Act 1932.	Copy of Certificate of Incorporation
2	The bidder should be in operation in India in the business for the last five (05) years as on 31st March 2022 in India.	Copy of Memorandum & Articles of Association should be attached, and Work orders confirming year and Area of activity
3	<ul> <li>The bidder should have a valid Certificates of:</li> <li>GSTN where business is located</li> <li>PAN/TAN Number</li> <li>PF Certificates along with copies of IT return of last</li> <li>3 Assessment Year</li> </ul> Note: Any certificate should belong to a date not later than the last day of bid submission	Copy of the certificates
4	Bidder should have an average annual turnover of at least Rs. 50 Crores, from the last 3 financial years (FY 2019-20, FY 2020-21 & FY 2021-22) from IT / ITEs services	Copy of Certificate duly signed by Statutory Auditor. Consolidated Balance Sheet for last 3 FY
5	Bidder's Net Worth should be positive in the last 03 financial years (FY 2019-20, FY 2020-21 & FY 2021-22,)	Copy of Certificate duly signed by Statutory Auditor
6	<ul> <li>The bidder must have following certifications with validity:</li> <li>ISO/IEC 20000:2018</li> <li>ISO/IEC 27001-2013</li> <li>ISO 9001:2015</li> </ul>	Copy of quality certificate or documentation of the quality policy.
7	Bidder should have minimum 100 technically competent IT personnel on their payroll	Certificate from Authorized person in HR Department of the Bidder to be furnished.
8	Bidder should submit the Bid security (EMD)	In the form of BG/DD

-		
9	Bidder should have an office at Odisha. In case, Bidder does not have an office at present, then Bidder needs to submit an undertaking to open an office in Odisha within 30 working days from the date of signing of the agreement.	Undertaking on Letterhead signed by the authorized signatory of the Bidder.
10	The bidder should not under a declaration of ineligibility for corrupt or fraudulent practices and must not be blacklisted by any State Govt./ Central Govt., for any reason, at the time of bid submission.	Bidder should submit the self- certification.
11	Authorized Signatory of the Bid.	Power of Attorney, in the name of person signing the Bid, authorizing him to sign /submit bid as a binding document
12	<ul> <li>Sub-Contracting:</li> <li>For items such as site preparation, earthing, cabling &amp; installation the bidder may work with local enterprise partner (having presence in Odisha for more than 7 Years). The bidder shall not allow a sub-contractor to assign or enter into further secondary subcontract for any of the work to be carried out by the sub-contractor. However, the bidder can subcontract few activities as mentioned above to companies fulfilling the following conditions:</li> <li>The sub-contractor must be having ISO 9001:2015</li> <li>The sub-contractor should have been in IT/ITES business for last 7 years as on 31st March 2022</li> <li>The sub-contractor must have GSTIN registration no., PAN/TAN number</li> <li>The sub-contractor must have local presence in Odisha for last years as on 31<sup>st</sup> March 2023</li> <li>The average annual turnover of sub-contractor from similar project (i.e. from Site Preparation, LAN Cabling, Installation of IT/Surveillance</li> </ul>	<ol> <li>ISO Certification</li> <li>GSTIN, PAN/TAN Certificate</li> <li>Balance Sheet and CA Certificate</li> <li>Proof of operation in similar business for more than 7 years</li> </ol>

	Financial Years i.e. 2017-18, 2018-19, 2019-20,	
	2020-21, 2021-22	
	However, the overall responsibility & obligation	
	towards fulfillment of the RFP & SLA would be of	
	selected SI only	
Bidder	's Relevant Project Experience	
13	The bidder must have successfully implemented at	Self-Attested Copies of Work
	least one project including CCTV Surveillance	orders with valid
	System/Integrated Traffic Management System	implementation/ completion
	(ITMS)/Smart City Project with minimum 100 Cameras	certificates of the projects.
	for Central govt./State govt./PSU across any state in	
	India in the last 7 years. Quoted project must have	
	been made live and at-least one year of O&M must	
	have been completed.	
14	The bidder must have experience in successfully	Self-Attested Copies of Work
	implementation of integrated turnkey projects around	orders with valid
	similar scope (ICT Components) as System Integrator	implementation/ completion
	in the last 7 years.	certificates of the projects
	• At-least one project with minimum value of project	
	is Rs. 20 Crore.	
	(Specifically, each project must have components of IT	
	Hardware, Networking, Surveillance, NOC/Helpdesk	
	System excluding civil work)	
Note:	<u>.</u>	
Ι.	All the documents/forms, as mentioned above, need to	be submitted by the bidder as
	per the formats given in the RFP in their letter head wit	h proper sign and stamp by the
	authorized person. All the quoted project must have beer	n made live and at-least one year
	of O&M must have been completed. Only credentials	from State/Central Govt./PSU
	customers will be acceptable and contact details of	customers to be provided for
	verification, if necessary.	

- II. Bidder not having local presence in Odisha has to mandatorily sublet minimum 25% of work (Non-core activities) related to site preparation, LAN cabling, electrical cabling, equipment installation & maintenance activities to local partner as per Sub-contract clause mentioned at point 12 above.
- III. Bidder already having local presence or office in Odisha for more than last 7 years then subletting of 25% work to local partner is non- mandatory

#### 4.3 Technical Qualification Criteria

The Tender Committee will carry out a detailed evaluation of the bids in order to determine whether the technical aspects are in accordance with the requirements set forth in the RFP documents.

In order to facilitate the technical bid evaluation, the technical criteria laid down have been presented in the following table. The marking scheme presented here is an indication of the relative importance of the evaluation criteria. Bidders securing a minimum of 70% marks in the technical evaluation will only be considered for further Commercial Bid evaluation. Bids, which do not secure the minimum, specified technical score will be considered technically non-responsive and will not be considered for evaluation.

Bidders will be evaluated for technical capability to execute the project according to the following criteria:

No.	Technical Evaluation Criteria/Sub Criteria	Description for Marks	Max Marks
1.	Past Experience of the Bidder		
a.	Technically Compliance to all IT & Non- IT items asked in this RFP.	Technical Compliance Documents	30
b.	Surveillance Project with minimum 100 Cameras implementation in any Central Govt./State Govt./PSUs across any state in India in the last 10 years.	<ul> <li>For each project the marks would be based on the following:</li> <li>Project with 100 Cameras – 5 marks</li> <li>More than 100 Cameras – 10 marks</li> </ul>	10
С.	<ul> <li>The bidder must have an experience in implementation of integrated turnkey projects with similar scope (ICT Components) as a System Integrator in the last 7 years.</li> <li>At-least one project with minimum value of project is Rs 20 Crore.</li> </ul>	<ul> <li>1 project with value &gt;=20 Cr = 10 marks</li> <li>2 projects each with value &gt;=15 Cr = 10 Marks</li> </ul>	10

	(Specifically, each project must have components of IT Hardware, Networking, Surveillance System, NOC/Helpdesk Implementation).	<ul> <li>3 projects each with value</li> <li>&gt;=10 Cr = 10 Marks</li> </ul>	
d.	Bidder should have minimum 100 technically compete IT personnel on their payroll (Full Time Employees (FTE). Documentary evidence in the form of declaration from competent authority of organization to be submitted.	<ul> <li>Up-to 100 FTE = 0 marks</li> <li>&gt;= 101 and &lt; 125 manpower = 5 marks</li> <li>&gt;= 125 and &lt; 150 manpower = 7 Marks</li> <li>&gt;=150 = 10 Marks</li> </ul>	10
e.	Bidders should have a project experience in setup of command & control center in India for any State/PSUs/Smart City /Metro/Railways/ULBs and integration with surveillance component/ITMS etc. in last 7 years.	<ul> <li>For each project the marks would be based on the following:</li> <li>1 project = 5 Marks</li> <li>2 Projects = 10 Marks</li> </ul>	10
2.	Proposed Solution		
a.	Proposed solution, Approach, Methodology, Project Management and Training Plan, & Technical Presentation		30

Total Marks	consumables management plans Proposed Training plan	100
	the SLA norms. Spare and	

#### 4.4 Sequence of Technical Bids Evaluation.

- The Bidders technical solutions proposed in the bid document and quality of the services will be evaluated as per the scope of the work and requirements of the department by the committee.
- The technically qualified Bidders will be considered for opening of financial bid. Criteria for technical qualification is as described above. Bidders must score at least 70% Marks out of 100 in the technical scores in order to be considered for technical qualification.

#### 4.5 Financial Bid Criteria

The financial bids of only those Bidders, who have scored at least 70 marks in the technical evaluation process, will be opened. The Financial Bids of technically qualified Bidders will be opened on the prescribed date in the presence of Bidder representatives who choose to attend the financial Bid Opening. The date and time to be communicated to all the technically qualified Bidders. The Bidder's representatives who are present shall sign in register evidencing their attendance. The name of Bidder and Bid Prices will be announced at the meeting.

#### 4.6 Award of project

- (i) The technically qualified Bidder (who has scored at least 70% marks in technical evaluation process) Financial Bid will be opened
- (ii) The project will be awarded on Least Cost Selection Evaluation (LCS) method and will be considered as most responsive bid and work will be awarded to the L1 Bidder.
- (iii) In the event the financial bid scores are 'tied', the Bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.

- (iv) The decision of the Evaluation Committee in the evaluation of the Technical and Financial bids shall be final and binding on all the bidders. No correspondence will be entertained outside the process of negotiation/ discussion with the Bid Evaluation Committee.
- (v) Any effort by a Bidder to influence the Bid Evaluation Committee's processing of Bids or award decisions may result in the rejection of the Bid.

## 4.7 For the purpose of Least Cost Selection Evaluation (LCS)

a) The financial bids/ cover of bidders who qualify in technical evaluation shall be opened at the notified time, date and place by the members of the designated Procurement Committee in the presence of the bidders or their representatives who choose to be present.

b) The process of opening of financial bids/ covers shall be similar to that of technical bids.

c) The names of the bidders, the rates given by them and conditions put, if any, shall be read out and recorded.

d) Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.

e) Prices quoted in the Bid must be firm and final and shall not be subject to any modifications, on any account whatsoever except applicable tax rates. The Bid

Prices shall be indicated in Indian Rupees (INR) only.

f) The bid price will include all taxes and levies and mentioned separately. h) Any conditional bid would be rejected.

g) If there is no price quoted for certain material or service, the bid shall be declared as disqualified.

h) Commercial bids of those Bidders who are technically qualified in the technical evaluation will only be opened. All other commercial bids will not be opened. The financial evaluation shall be done based on the details submitted by the bidder as per the format provided. The bidders shall be sorted in the ascending order as L1, L2, and L3 etc.

#### 4.8 Clarification of Bids

- To assist in the examination, evaluation, comparison and qualification of the Bids, the bid evaluation committee may, at its discretion, ask any bidder for a clarification regarding its Bid. The committee's request for clarification and the response of the bidder shall be through the e-Procurement portal.
- 2. Any clarification submitted by a bidder with regard to its Bid that is not in response to a request by the committee shall not be considered.

- 3. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the committee in the evaluation of the financial Bids.
- 4. No substantive change to qualification information or to a submission, including changes aimed at making an unqualified bidder, qualified or an unresponsive submission, responsive shall be sought, offered or permitted.

#### 4.9 Non-material Non-conformities in Bids

- a. The bid evaluation committee may waive any non-conformities in the Bid that do not constitute a material deviation, reservation or omission, the Bid shall be deemed to be substantially responsive.
- b. The bid evaluation committee may request the bidder to submit the necessary information or document like audited statement of accounts/ CA Certificate, GST Registration Certificate, Latest GST clearance certificate, ISO Certificates, etc. within a reasonable period of time. Failure of the bidder to comply with the request may result in the rejection of its Bid.
- c. The bid evaluation committee may rectify non-material nonconformities or omissions on the basis of the information or documentation received from the bidder under (b) above.

#### 4.10 Correction of Arithmetic Errors in Financial Bids

The bid evaluation committee shall correct arithmetical errors in substantially responsive Bids, on the following basis, namely: -

- a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the bid evaluation committee there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to clause (a) and (b) above.

#### 4.11 Price/ purchase preference in evaluation

Price and/ or purchase preference notified by the State Government and as mentioned in the bidding document shall be considered in the evaluation of Bids and award of contract.

#### 4.12 Negotiations

- a. Except in case of procurement by method of single source procurement or procurement by competitive negotiations, to the extent possible, no negotiations shall be conducted after the pre-bid stage. All clarifications needed to be sought shall be sought in the pre-bid stage itself.
- b. Negotiations may, however, be undertaken only with the lowest or most advantageous bidder when the rates are considered to be much higher than the prevailing market rates.
- c. The bid evaluation committee shall have full powers to undertake negotiations. Detailed reasons and results of negotiations shall be recorded in the proceedings.
- d. The lowest or most advantageous bidder shall be informed in writing either through messenger or by registered letter and e-mail (if available). A minimum time of seven days shall be given for calling negotiations. In case of urgency the bid evaluation committee, after recording reasons, may reduce the time, provided the lowest or most advantageous bidder has received the intimation and consented to regarding holding of negotiations.
- e. Negotiations shall not make the original offer made by the bidder inoperative. The bid evaluation committee shall have option to consider the original offer in case the bidder decides to increase rates originally quoted or imposes any new terms or conditions.
- f. In case of non-satisfactory achievement of rates from lowest or most advantageous bidder, the bid evaluation committee may choose to make a written counter offer to the lowest or most advantageous bidder and if this is not accepted by him, the committee may decide to reject and re-invite Bids or to make the same counter-offer first to the second lowest or most advantageous bidder, then to the third lowest or most advantageous bidder and so on in the order of their initial standing and work/ supply order be awarded to the bidder who accepts the counter-offer. This procedure would be used in exceptional cases only.
- g. In case the rates even after the negotiations are considered very high, fresh Bids shall be invited.

# 4.13 No Commitment to Accept lowest or any Tender

The OCAC shall be under no obligation to accept the lowest or any other offer received in response to this tender notice. OCAC reserves all the right to accept / reject any tender without assigning any reason thereof.

# 5 Scope of Work

Implementation of Command & Control Surveillance System in all Sub-Registrar Offices (SRO), District Registrar Office (DRO) & Inspector General of Registration (IGR) Office Cuttack, under Revenue & Disaster Management Department, Govt. of Odisha. The total number of offices under this project are given below: -

- 1. Sub- Registrar Offices (SROs) 205 Nos
- 2. District Registrar Offices (DROs) 30 Nos
- 3. Inspector General of Registration (IGR) Office 1 No

The systems propose Integrated Security Solutions to the above offices across the state. This will enable easy surveillance with centralized administration for complete monitoring of activities with video management, video analytics to safeguard assets by preventing unauthorized access to people and property.

The proposed components for the solution are as follows:

- ✓ Video Surveillance System
- ✓ Fire Alarm System
- ✓ Emergency IP Communication Network
- ✓ Incident Management System
- ✓ District Level Control Room
- ✓ State Head Quarter Control Room

# 5.1 Sub-Registrar Offices (205 Nos)

- ✓ 205 Number of Sub- Registrar Offices (SROs) will have connectivity with District Registrar Offices (DROs).
- Proposed Sub- Registrar Office will have 6 High-Definition Surveillance Cameras with local recording having four numbers of 5 MP & two numbers of 2MP camera integrated with Fire Alarm System with recording of all the CCTV footages.
- ✓ Provision of Emergency IP Communication Network.
- ✓ Provisioning of AI based Video Analytics for Facial Recognition based Attendance and Reports.
- ✓ Provision of 32 Inch HD LED monitor for the live viewing of cameras.
- ✓ On-Demand Monitoring of Sub- Registrar Offices from District Registrar Offices and State Control Room (IGR Cuttack Office).
- ✓ Fire protection & safety solution is a major concern in all these SRO offices.
- ✓ Provision of conventional fire alarm system in these Sub- Registrar Offices (SROs) and will have a facility to monitor from the central location.
- ✓ Dedicated Emergency Communication Network for easy communication and handling of any critical situation by provision of one (01) no of IP Phone at all Sub-Registrar Offices across the State.

# 5.2 District Registrar Offices (DROs) – 30 Nos

- ✓ 30 Number of District Registrar Offices (DROs) which acts as a District Control Room have the dedicated connectivity with State Control Room i.e., Inspector General of Registration (IGR) Office at Cuttack.
- ✓ Proposed District Registrar Offices will have 4 High-Definition Surveillance Cameras with Fire and Emergency IP Communication Network with recoding of all the CCTV footages.
- ✓ Provision of 50 Inch HD LED monitor with required Monitoring Software for the live viewing of CCTV Camera footage of Sub- Registrar Offices.
- ✓ On-Demand Monitoring of a District control room from state control room.
- ✓ Dedicated Emergency Communication Network for easy communication and handling of any critical situation by provision of one (01) no of IP Phone at all District Registrar Offices across the State.

# 5.3 Inspector General of Registration (IGR) Office – 1 No

- ✓ Setup of Central Command & Control Centre at IGR office at Cuttack for monitoring of SROs & DROs office activities.
- ✓ Supply, Installation & Commissioning of Workstations.
- ✓ Supply, Installation of required furniture and fixture for control room.
- ✓ Supply, Installation & Commissioning of 2x2 Video wall (55" LEDs) along-with controller for viewing of the feeds from field offices and perform standard operating procedures (SOPs).
- Dedicated Emergency Communication Network for easy communication and handling of any critical situation by provision of six (06) nos of IP Phone at control room.
- ✓ Supply of all the equipment's for the implementation of Centralized Command Control Application.

# 5.4 The selected SI shall be responsible for the execution of the following work.

- Site survey & feasibility is to be undertaken for identification of the actual places in all offices of Sub-Registrar (205 Offices), District Registrar Offices (30 Nos.) & IGR, Odisha, Cuttack premises where cameras & secure controlling system are to be installed.
- Procurement, Supply, Installation, Commission & Maintenance of the entire equipment at different Registration offices across the state of Odisha.
- Required LAN cabling at site with supply of items like screws, clamps, fasteners, ties, anchors, supports, grounding strips, wires, termination kits etc. for the smooth implementation of CCTV Surveillance System.

- Supply of all the equipment's for implementation of IP based CCTV Surveillance System, AI based Video Analytics and Fire Alarm Systems Complying to the Technical Specifications
- Supply, Install, Commission and Operation & Maintenance of the entire equipment's of Command Control Surveillance System.
- The proposed Command Control Surveillance System should also have facility to view video recordings of various cameras at a centralized location.
- The Command Control Surveillance System should be secured enough and ensure illegal access to the CCTV controller.
- The System should have a data management strategy for the storage of the captured video for historical, investigation and evidentiary purposes.
- System Integrator should ensure provision of storage space for keeping the footage of CCTV for a period of minimum 90 days at each sub-registrar office.
- The System should be able to set system rules for deletion of archived recordings as per the policy provided by IGR office from time to time.
- The Selected System Integrator shall setup a Support Unit with minimum Three (3) numbers of dedicated technical resources at Central Location for day to day operation & management support.
- IGR, Odisha shall provide a dedicated Central Monitoring room at Cuttack with necessary arrangements like Electricity/Well Furnishing Room/Telephone line etc.
- Supply, Installation & Commissioning of Video Analytics System and enable video analytics as per the requirement mentioned in this RFP.
- Setup of centralized helpdesk system and deployment of helpdesk operator for day to day support and operation management at IGR Cuttack office.
- Deployment of Operator for 24x7 monitoring purpose and perform necessary action as per defined SOPs.
- The Central location will be able to view the live feed of all the cameras installed in various location.
- Video Management Software at Central location with required licenses to monitor and manage each and every CCTV Cameras installed in SROs & DROs.
- Supply, Installation & Commissioning of Servers at Central location to install VMS & other applications.
- At the time of equipment delivery, the selected SI shall submit a certificate/ undertaking from OEMs mentioning the fact that the equipment supplied are covered under warranty for a period of 3 Years.

- The selected bidder shall be responsible for providing necessary training and submit the commissioning certificate at each location.
- The warranty & maintenance support shall start from the date of Final Acceptance Test (FAT).

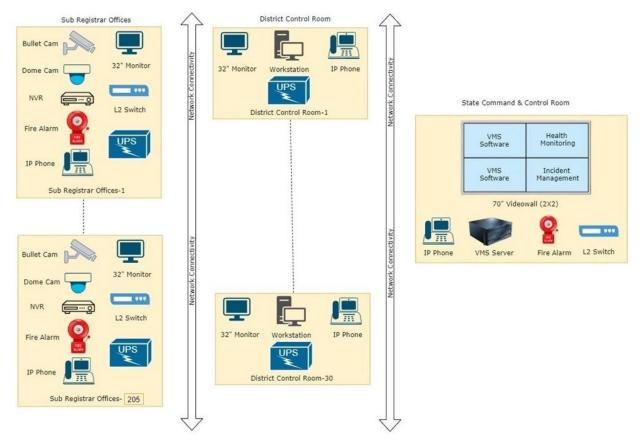


Figure: Indicative Deployment Architecture of SROs, DROs & IGR Office Cuttack

# 5.5 Manpower

The bidder is to propose the most optimum team for operation, maintenance and management of project District control room & Central Command & Control Center to maintain the SLA. The bidder shall deploy skilled resources with relevant experience and expertise to manage project in an efficient manner and establish proper team structure to monitor and control the project. The Project Management Office consists of Project Management Team of senior resources and other support staffs as required for the project operation shall report to IGRS/OCAC. The Project Manager shall function under the office nominated by the OCAC/IGRS.

The bidder shall engage adequate and competent manpower as per the following project requirement.

- ✓ To provide services to manage the technical as well as functional aspects of the project and to maintain the SLAs as per requirement
- ✓ Client Co-ordination
- ✓ Project Monitoring and Control
- ✓ Quality Assurance and Control
- ✓ Resolving Project related issues
- ✓ Review of Asset Reconciliation
- ✓ Hardware Maintenance
- ✓ Network Issues Monitoring
- ✓ Quarterly Project Progress Review Meeting
- ✓ MIS Reporting of the Project
- ✓ Administrative Issues Resolution
- ✓ Compliances submission to Government

S. No.	Item Description	No.	Qualification	Min. Experience Years	Locations
1	Project Manager	1	BTech/BE/MCA	10	Central Command & Control Center
2	Central Technical Helpdesk Support	3	Graduate with Good Knowledge in Computer	2	Central Command & Control Center
3	CCTV Resident Field Engineer	4	Diploma/Graduate with Good Knowledge CCTV.	1	Field Offices

**Note:** This is minimum indicative list of resource and based on actual requirements, the bidder may deploy any number of resources to meet the SLA. The OCAC/IGR shall not pay any cost for additional resources required to operate, maintain monitor & manage the SLA. In case support staff is not available or is on leave, the bidder is required to provide the alternative personnel with same or higher technical capabilities of the non-available personnel.

# **Roles & Responsibilities of Manpower**

- Responsible for overall Operations and management of the existing as well as new IT Infrastructure, hardware, peripherals of respective site including LAN/WAN, IP CCTV Surveillance system, MIS Reporting, SLA Management etc.
- Managing day-to-day activity and project operations to meet SLA.
- Preparation of Report including day to day activity, Call logging, uptime, downtime, response time of each event & submission of quarterly report to respective officer as a supportive document for O&M activity and its payment.
- Maintain Call Register
- Reporting to concerned District Registrar (DR) office or as decided by OCAC/IGR. Manpower will be placed in the District Registrar (DR) office to attend the call from that DR office. However, this manpower must attend the calls related to all SROs which come under to respective DR office. The cost for the transportation will be borne by the successful agency.
- Configuration of camera, Server plus Network attached storage or Server with inbuilt storage, VMS, network switch etc. Troubleshooting of entire system.
- Replacement of faulty equipment, demand and supply of required hardware from the spare hardware.
- Monitoring complaint status, follow up for complain resolution and responsible for resolve complain in time bound manner as decide in the SLA mentioned in this bid
- Deputed manpower shall be responsible to log the complaint related to connectivity, coordinate with connectivity vendor, follow up for logged complain related to connectivity and ticket generation for respective event and responsible to inform authority for connectivity complain and its resolution time and maintain the register for connectivity complaint.
- Deputed manpower is responsible to follow the instruction received from respective officer related to configure the system as per requirement.
- During the holiday if respective officer is asked to present for to ensure the system up and running then deputed manpower shall be responsible to remain present on holiday.
- At the time of a disaster or any such events, the deputed manpower must be always present.
- If respective officer wishes extract video clip than, Deputed manpower is responsible to extract the video clip, burnt CD/DVD, copy video clip and image in pen drive.

# 5.6 Training

Bidder shall provide system training to its stakeholders having comprehensive hands-on training related to system operation of the installed peripherals/equipment's to the designated/authorized representative of respective site after the successful commissioning of the project. Appropriate training material should be provided by the bidder during the training. All the cost associated with such training must be borne by the bidder. Bidder has to submit detailed training plan along-with their proposal.

# 5.7 Roles & Responsibilities of OCAC/IGR

- ✓ Provide access to selected agency for execution of Project.
- ✓ Provide space, raw power and approval to smoothly execute Project.
- Provide approval & facilitate agency for deciding location of camera in consultation with selected agency.
- Provide the siting space to technical manpower at respective location of department.
- Monitor the project by logging complaint in time limit and monitoring and tracking of complaint resolution in time limit.
- ✓ Maintaining & checking all register and calculation of downtime.

# 5.8 Operation & Maintenance

The bidder will be required to maintain the on-site warranty for all the hardware deployed under this project for a period of 5 years from the date of Go-live of project. During O&M phase, bidder shall ensure that service levels are monitored on continuous basis; service levels are met and are reported to OCAC/IGR. After Go-Live, if any system/sub-system/appliance that is deployed during the O&M phase must be added in the System only after proper induction procedures are followed including hardening and security testing.

Every process and procedure implemented in this project must be reviewed and updated by bidder at least on annual basis from the Go-Live Date. All the manpower engaged for O&M support of the project should be citizens of India. Bidder will ensure that, in any circumstances, no data of CCTV Surveillance System be ported outside the geographical limits of the country. Some broad details of O&M activities are mentioned below:

#### 5.8.1 Facility Management Services & Helpdesk Support

Bidder has to provide Facility Management Services and a centralized helpdesk which will work as a single point of contact for complaint management & resolution for all the users of the system. The helpdesk shall be designed to meet the SLA response & resolution timelines. The bidder should provision the Monitoring/Ticketing tool of their own and should capture all the incidents/complaints received related to supplied CCTV equipment and their operation from different Police Stations. The tool should have capable enough to generate reports on the numbers of complaints received & resolved. Reports generation should be on monthly, quarterly & yearly basis etc.

The bidder shall provide Facility Management Services (FMS) for CCTV Surveillance System including day-to-day operations of all IT/Non-IT Items/services, District Control Room & Central Command & Control Center items/services for entire project period of five years.

The bidder shall setup 24x7 helpdesk system at Central Command & Control Center (CCCC) with at least one resource per shift to manage the SLAs.

#### 5.8.2 Asset Management Services

The bidder shall be required to create and maintain a database of all IT and Non-IT assets installed at all locations under CCTV Surveillance system (including SROs, District Control Room, CCCC etc.) and other field infrastructure connected with central command and control center as per following details:

- ✓ The database should have information like make, model, configuration details, serial numbers, licensing agreements, warranty and AMC details, place of installation etc.
- ✓ The bidder shall be required to create and maintain software inventory with information such as Licenses, Version Numbers and Registration Details along with their configuration details and history
- ✓ The System Integrator shall be required to register all software with respective OEMs
- ✓ The System Integrator shall be required to perform software license management. The software shall remain under technical support from respective OEMs for a complete FMS period of five years
- ✓ The System Integrator shall use software for Asset Management Services

#### 5.8.3 Preventive Maintenance Services

The bidder shall provide preventive maintenance services for all the equipment's (IT as well as non-IT) supplied at least once in every quarter. The preventive maintenance shall include:

- ✓ Cleaning and removal of dust and dirt from the interior and exterior of the equipment.
- ✓ Conduct inspection (check for loose contacts in the cable and connections etc.), testing, and execution of diagnostics and necessary repairing of equipment.
- ✓ Bidder shall intimate and take approval from OCAC/IGR before carrying out preventive maintenance activity.
- ✓ Bidder shall maintain a register of item wise preventive maintenance done.

# 5.8.4 Corrective Maintenance Services

The details of the work to be undertaken by System Integrator are as follows:

- ✓ Troubleshooting of problems related to the equipment/network/services and rectification of the same.
- ✓ Repairing of defective parts/components.
- ✓ Replacement of parts/components beyond repair with parts/components of same or better specifications ensuring compatibility without any additional cost.
- ✓ Providing suitable standby for parts/components with same or better specifications till the time the original part/component is repaired or replaced so that daily business is not affected.
- ✓ The maintenance support for equipment shall include all passive components including, screws, clamp, fasteners, ties anchors, supports, ground strips, wires, fiber connecting kits, gears, spares, power-cables, network cables, etc.
- ✓ Documentation of problems, isolation, cause and rectification procedures for building knowledge base for the known problems

# 5.8.5 Network Management Services

A LAN has to be established in the SROs for connecting CCTV systems, District Control Room, Central Command & Control Center connecting various equipment's including servers, SAN, Network switches, workstations etc. SROs will be connected with DR offices and Central Command & Control Center (CCCC) though MPLS VPN or SWAN network provided by OCAC/IGR. The scope of work under network management services would include:

✓ To ensure continuous operation and upkeep of the LAN Infrastructure at all locations including all active and passive components so that the network is available 24 x7 as per the prescribed SLA.

- ✓ Management and maintenance of internet bandwidth / links provided by ISP, if any
- ✓ The bidder shall coordinate with SWAN Team for integration of SWAN network with CCTV Surveillance Network from SROs till CCCC
- ✓ Maintenance and management of LAN established at all locations under CCTV Surveillance project

#### 5.8.6 Server Management Services

- ✓ Bidder shall manage the servers on end-to-end basis including server administration, performance tuning, hardware and software support and upkeep of the server. The System Integrator shall also undertake installation/re-installation of all the servers in terms of operating system, databases, clusters, virtualization, Application Server software, latest Software updates/upgrades, patches etc.
- ✓ Bidder shall provide device/peripherals management, user management, file system management, files management services for the servers.
- ✓ Bidder shall implement operating system security/hardening and application server software level security for the servers.
- ✓ Bidder shall deploy and upload/configure/host and manage web sites, application software and databases on the servers as per requirement. The SI shall also coordinate and provide all assistance/services to OCAC/IGR

# 5.8.7 Workstation/Desktop Management Support

- Bidder shall maintain and install OS, desktop/client software etc., as and when required and provide services, such as relocation of PCs, or adding or removing accessories attachment or other devices/peripherals.
- ✓ Bidder shall maintain record of all new machines installed, movement of machines within site, changes and configuration of machines.
- ✓ Bidder shall perform any install, move, add or change (IMAC)
- ✓ Bidder shall configure/reconfigure client machines to ensure optimum network connectivity and applications/service availability to all users.
- ✓ Bidder shall install, reload, and reconfigure any desktop/office automation software, browsers, applications, clients of any application etc., as and when required.
- ✓ Bidder shall re-establish network connectivity and application availability after any hardware/software failure.

#### 5.8.8 Database Management Services

- ✓ Bidder shall undertake tasks of managing changes to database schema, disk space, storage, user roles.
- ✓ Bidder shall periodically perform configuration checks and fine tune the databases with respect to performance and proactive identification of potential problems
- ✓ Bidder shall provide performance monitoring, maintenance and tuning of the databases on regular basis as well as proactive health check-ups.
- ✓ Bidder shall manage database upgrade, patch upgrade, patches, updates as and when required with planned minimal downtime.
- ✓ Bidder shall provide database performance and health reports to OCAC/IGR as per standards.
- ✓ Bidder shall assign rights on database for different users.
- ✓ Bidder shall upload / create users and tables in the data base.

# 5.8.9 Storage Administration & Management Services

The bidder shall be responsible for the configuration/reconfiguration and management of the storage solution to provide the following services:

- ✓ Management of key resources in the Storage solution
- ✓ Management of interconnects between key resources in the Storage solution
- ✓ Managing the health of key resources in the Storage solution
- ✓ Managing the available performance of interconnects in the Storage solution
- ✓ Managing the performance of the Storage interconnect solution
- ✓ Management of the zones being enforced in the Storage solution
- ✓ Managing the storage volumes in the Storage solution
- ✓ Managing the connectivity and access rights to Storage Volumes in the Storage solution
- ✓ Facilitating OCAC/IGR in connecting to the Storage later and provide access rights as required.

# 5.8.10 Data Backup Management & Services

✓ Bidder shall ensure that all the CCTV footage are available for 90 days at respective SROs and other locations.

# 5.9 Comprehensive OEM Warranty

The Successful bidder shall:

I. Provide comprehensive OEM Warranty for a period of 5 years

- II. The warranty & support shall start from the date of final delivery of all the items and acceptance of the IT Hardware and peripherals. Warranty to start from date of acceptance.
- III. Be responsible to ensure adequate and timely availability of spare parts needed for repairing the supplied goods during the warranty period.

# 5.10 Right to alter Quantities

OCAC reserves the right to give repeat order to the selected bidder for maximum upto 25% of ordered quantity, if requires within the tender validity period of 180 days from the last date of submission of bid under same terms and conditions. Any decision of OCAC in this regard shall be final, conclusive and binding on the bidder. If OCAC does not purchase any of the tendered articles or purchases less than the quantity indicated in the bidding document, the bidder(s) shall not be entitled to claim any compensation.

# 5.11 Confidential Information

OCAC and Selected bidder shall keep confidential and not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract.

# 5.12 Specifications and Standards

- I. All articles to be supplied shall strictly confirm to the specifications, trademark laid down in the tender form and wherever articles have been required according to ISI/ ISO/ other applicable specifications/ certifications/ standards, those articles should conform strictly to those specifications/ certifications/ standards. The supply shall be of best quality and description. The decision of the competent authority/ purchase committee whether the articles supplied conform to the specifications shall be final and binding on the selected bidder.
- II. Technical Specifications
  - a) The Selected bidder shall ensure that the goods and related services comply with the technical specifications and other provisions laid down in the tender document & the work order.

- b) The Selected bidder shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- c) The goods and related services supplied under this Contract shall conform to the standards mentioned in bidding document and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country of origin of the Goods.

# 5.13 Transit Insurance

I. The CCTV cameras and peripherals to be supplied under the Contract shall be fully insured against any loss during transit from OEM site to Nodal office sat district level. The insurance charges will be borne by the supplier and OCAC will not pay such charges.

# 5.14 Inspection

- I. OCAC or its duly authorized representative shall at all reasonable time have access to the OEM's premises and shall have the power at all reasonable time to inspect and examine the materials and workmanship of the goods/ equipment/ machineries during manufacturing process or afterwards as may be decided.
- II. OCAC shall conduct inspection for which the cost shall be borne by OCAC. OCAC shall undertake the inspection of the CCTV Cameras and peripherals in accordance to the standard procedures being followed by OCAC in Quality Inspection.
- III. For verification of IT & Non-IT infra to be supplied under CCTV surveillance project the bidder shall deliver all the equipment at OCAC/bidder warehouse at Bhubaneshwar and after verification/inspection, the bidder should deliver the equipment at respective location without any additional cost.
- IV. The inspection team shall prepare a Report specifying satisfactory operational condition of the inspected equipment, gaps identified and necessary corrective measurements required by the Bidder.
- V. OCAC may engage any Third Party Agency (TPA), who shall be responsible to perform the inspection of the equipments in accordance with Industry Standards. OCAC shall bear the inspection charges of TPA.

# 5.15 Rejection

Articles not approved during inspection or testing shall be rejected and will have to be replaced by the selected bidder(s) at his own cost within 2 weeks or the time fixed by Competent Authority

# **5.16** Authenticity of Equipment(s)

- I. The selected bidder shall certify (as per Tech Form XI) that the supplied goods are brand new, genuine/ authentic, not refurbished, confirm to the description and quality as specified in this bidding document and are free from defects in material, workmanship and service.
- II. If during the contract period, the said goods be discovered counterfeit/ unauthentic or not to confirm to the description and quality aforesaid or have determined (and the decision of OCAC in that behalf will be final and conclusive), notwithstanding the fact that the purchaser may have inspected and/ or approved the said goods, the purchaser will be entitled to reject the said goods or such portion thereof as may be discovered not to confirm to the said description and quality, on such rejection the goods will be at the selected bidder's risk and all the provisions relating to rejection of goods etc., shall apply.
- III. Goods accepted by the purchaser in terms of the contract shall in no way dilute purchaser's right to reject the same later, if found deficient in terms of this clause of the contract.

SI. No.	Particulars	Make & Model Name	[A] Quantity
1	Conventional Fire Alarm System With Intelligent Siren cum Strobe		01
2	IP Dome Camera (With POE)		04
3	IP Bullet Camera (With POE)		02
4	8 Channel Network Video Recorder (NVR)		01
5	AI based Video Analytics		02
6	Local Processing Unit for Video Analytics		01

# 5.17 List of Indicative Items Required at Each Sub Register Office (SRO) BoM

7	8 Port L2 Managed POE Switch with 10/100 Mbps	01
8	1 KVA UPS with 1 Hour Backup	01
9	6U Wall Mounting Rack	01
10	32" LED Display System	01
11	IP Phone	01
12	Earthing (Chemical) with suitable copper cable for connection up to UPS	01
13	Cat-6 Cable STP (UOM @ Meter)	300
14	ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)	300
15	Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)	300
16	One time Installation, Integration & Hand holding	LS

# 5.18 List of Indicative Items Required at Each District Register Office (DRO) BoM

SI. No.	Particulars	Make & Model Name	[A] Quantity
1	IP Dome Camera (With POE)		02
2	IP Bullet Camera (With POE)		02
3	8 Channel Network Video Recorder (NVR)		01
4	24 Port L2 Managed POE Switch with 10/100 Mbps		01
5	1 KVA UPS with 1 Hour Backup		01
6	6U Wall Mounting Rack		01
7	Workstations		01

# RFP for Selection of System Integrator for Supply, Installation, Commissioning & 2023 Maintenance of CCTV Surveillance System at all SROs

-		
8	IP Phone	01
9	50" LED Display System	01
10	Software to view the cameras & alarms from SRO	01
11	Earthing (Chemical) with suitable copper cable for connection up to UPS	01
12	Cat-6 Cable STP (UOM @ Meter)	300
13	ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)	300
14	Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)	300
15	One time Installation, Integration & Hand holding	LS

# 5.19 List of Indicative Items Required at Command & Control Center (CCC)

SI. No.	Particulars	Make & Model Name	[A] Quantity
1	Server for Command & Control Center Application		02
2	Central Video Management Software		01
3	Video Management Software Remote Camera License		1350
4	Central Dashboard for Al based Video Analytics		01
5	Workstation		03
6	24 Port L2 Managed POE Switch with 10/100 Mbps		02
7	2x2 Video Wall (55")		01
8	Video Wall Controller with necessary Cables and Connectors		01
9	IPBX with 500 Ports		01

# RFP for Selection of System Integrator for Supply, Installation, Commissioning & 2023 Maintenance of CCTV Surveillance System at all SROs

10	IP Phones	06
11	42U Rack	02
12	5 KVA UPS with 30 Minutes Backup	01
13	Helpdesk Management System Application	01
14	Earthing (Chemical) with suitable copper cable for connection up to UPS	01
15	Cat-6 Cable STP (UOM @ Meter)	400
16	ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)	400
17	Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)	400
18	Furniture Set-up and Civil Interiors work for CCC Room Considering 500 Sqft.	LS
19	One time Installation, Integration & Hand holding	LS

Project Implementation Phase and Key Deliverables

Complete system shall be implemented in following phases and bidder has to follow following implementation cycle.



# 5.20 Inception Phase

Once contract is awarded to selected bidder and agreement signed, bidder shall mobilize the team proposed for the project and will ensure that project inception report is prepared comprising the followings;

- ✓ Project Concept and Understanding
- ✓ Detailed Project Plan
- ✓ Approach & Methodology adopted for implementation of the project substantiating the approach mentioned in technical proposal
- ✓ Define project governance plan
- Resource planning and availability of resources during the project implementation period as well as during O&M phase
- ✓ Highlight the milestone and associated risks
- ✓ Responsibility matrix of all stakeholders
- ✓ Measure project deadlines and performance objective
- ✓ Geo-referencing of installation locations
- ✓ Also prepare and site survey reports & details of Offices where proper earthing, LAN, furniture, power points & other critical facilities are not available

# 5.21 Requirement Phase

Bidder will perform the detailed assessment of the business requirements and CCTV Surveillance Solution requirements as mentioned in this RFP. Based on the understanding and its own individual assessment, bidder shall develop & finalize the Functional/System Requirement Specifications (FRS/SRS) in consultation with OCAC/IGR and its representative.

# 5.22 Design Phase

Selected bidder shall design & build the solution as per the locations identified and mentioned in RFP. The solution proposed by bidder should comply with the design considerations requirements as mentioned in RFP.

Bidder shall do the site survey, design layout District Control Room and Central Command & Control Center, furniture and fixture and submit the same to department for approval.

# 5.23 Implementation Phase

Bidder shall carefully consider the scope of work and provide a solution that best meets the project's requirements.

- ✓ The bidder shall procure & supply:
  - CCTV Surveillance system as per requirement mentioned in the RFP
  - o Other IT & Non-IT Infrastructure as per requirement mentioned in the RFP
  - Supply, Install & Commission all furniture and fixture as per requirement and layout approved at District Control Room and Central Command & Control Center
  - Supply, Installation & Commissioning of LAN & Electrical Cabling at all locations for CCTV Surveillance system
  - Install & commission of all Cameras, VMS and other associated hardware at respective offices
  - Configure Video Analytics, Standard Operating Procedure and KPIs as per requirement of OCAC/IGR
  - Submit Item Delivery Report
  - Prepare and submit hardware and networking Installation report from each office
  - Manuals like technical manuals, user manuals, Site plan etc.
  - Any other required Documentation
  - Fortnightly project progress / status reports
  - Supply tools, accessories, documentation and provide a list of the same

# 5.24 Integration & Testing Phase

The successful bidder will be responsible for the integration of the Cameras with the proposed solution for recording of video feeds. The solution should be configured in such a way, so that the video feeds would be kept for 3 Months at SROs. After 3 Month, the video feeds would be overwritten unless it is flagged or marked by the appropriate authority for investigation or any other purpose.

The Central VMS application/system must be integrated with all field components to be supplied under CCTV Surveillance Project (i.e. at SROs/DROs) or software applications proposed to be implemented as part of the project requirement. Bidder shall provide the testing strategy including traceability matrix, test cases and shall conduct the testing of various components of the system implemented and the solution as a whole. The testing should be comprehensive and should be done at each stage of implementation and integration.

# 5.25 Go-live Phase

Bidder shall prepare and agree with OCAC/IGR, the detailed plan for Go-Live (in-line with OCAC/IGR implementation plan as mentioned in RFP).

- ✓ Bidder shall define the criteria for Go-Live of CCTV Surveillance System and its component in consultation with OCAC/IGR
- ✓ Bidder shall submit signed-off UAT report (issue closure report) ensuring all issues raised during UAT are resolved prior to Go-Live
- ✓ Bidder shall ensure that Go –Live criteria for CCTV Surveillance system and other application/component as mentioned in User acceptance testing of Project is met and bidder needs to take approval from OCAC/IGR on the same
- ✓ Go-live of the CCTV Surveillance system and its component shall be done as per the finalized and agreed Go-Live plan

# 5.26 Operation & Maintenance Phase

Operation and Maintenance period starts after commissioning of the solution at all locations and shall continue for a period of 5 years counted after getting successful implementation certificate. During this period, the selected bidder shall manage activities as defined in section 5.8.

# **6 Project Implementation Timelines and Payment Terms**

#### 6.1 **Project Timelines**

Bidder needs to adhere following project implementation timelines;

S. No.	Milestone	Timeline	Sign-off Criteria
1.	Signing of Contract Agreement between Department and the selected Bidder	TO	Contract Agreement

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S. No.	Milestone	Timeline	Sign-off Criteria
2.	SubmissionofDetailedimplementationplan/roadmap,InceptionReport,SiteSurvey,LayoutPreparationetc.	T0+15 Days	Approval from OCAC/IGR
3.	Delivery of all items (IT & Non-IT both) (at Central location / bidder warehouse at Bhubaneshwar)	T0 + 120 days	Proof of Delivery
4.	Setup of Central Command & Control Center and District Control Room (Interior work, lan, electrical cabling, furniture & fixture etc.)	T0 +120 days	Approval from OCAC/IGR
5.	Installation & Commissioning of CCTV camera and related accessories as per scope of work <b>Note:</b> The overall Installation and Commissioning of hardware, software and offering for acceptance shall be completed.	T0 + 180 days	Approval from OCAC/IGR
6.	Acceptance Testing	T0+180 days	Approval from OCAC/IGR
7.	Go-Live	T0+180 days	Approval from OCAC/IGR
8.	Operation & Maintenance	T1=60 months from date of Go-Live.	Quarterly SLA report sign-off Approval from OCAC/IGR

Note: The agreement signing date will be considered as the Start date for Timeline in all case.

# 6.2 Payment Terms

S. No.	Milestone	Payment (in %)
Capex Co	st (as per Financial Bid Format)	
1.	Successful Delivery and Inspection of Hardware/Equipment at the central location/Bidder's	50% of capex cost

# RFP for Selection of System Integrator for Supply, Installation, Commissioning & 2023 Maintenance of CCTV Surveillance System at all SROs

S. No.	Milestone	Payment (in %)
	Warehouse at Bhubaneswar	
2.	Successful Installation & Commissioning	20% of Capex
3.	Acceptance Testing	20% of Capex
4.	Go-Live	10% of Capex
Total Payout		100% of Capex
Opex Cos	t (as per Financial Format)	
5.	Operational & Maintenance support during the contract period of 5 years	In 20 Equal Quarterly Installments at the end of every quarter

**Note:** To ensure a reasonable and realistic ratio of CAPEX and OPEX, a bid may be liable to be rejected after scrutiny if total CAPEX happens to be more than 70% of the overall bid value.

# 7 Special Condition of Contract

#### 7.1 Termination Clause

#### 7.1.1 Right to Terminate the Process

OCAC reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by OCAC under the following circumstances: -

- a) The selected bidder commits a breach of any of the terms and conditions of the bid.
- b) The bidder goes into liquidation, voluntarily or otherwise.
- c) If the selected bidder fails to complete the assignment as per the time lines prescribed in the tender and the extension if any allowed, it will be a breach of contract. OCAC reserves its right to cancel the order in the event of delay and forfeit the bid security as liquidated damages for the delay.
- d) In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, OCAC reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder.
- e) OCAC reserves the right to recover any dues payable by the selected Bidder from any amount outstanding to the credit of the selected bidder, including the pending bills and/or invoking the bank guarantee under this contract.

# 7.2 Consequences of Termination

- I. In the event of termination of the Contract due to any cause whatsoever, [whether consequent to the stipulated term of the Contract or otherwise], OCAC shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Vendor shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow the next successor Vendor to take over the obligations of the erstwhile Vendor in relation to the execution/continued execution of the scope of the Contract.
- II. Nothing herein shall restrict the right of OCAC to invoke Performance Bank Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to OCAC under law or otherwise.
- III. The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

# 7.3 Extension in Delivery Period and Liquidated Damages (LD)

- I. Except as provided under clause "Force Majeure", if the selected bidder fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, OCAC may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in sub clause (iv) below for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in sub clause (iv). Once the maximum is reached, the Purchaser may terminate the Contract pursuant to clause "Termination".
- II. The time specified for delivery in the tender form shall be deemed to be the essence of the contract and the selected bidder shall arrange goods supply and related services within the specified period.
- III. Delivery and completion period may be extended with or without liquidated damages, if the delay in the supply of goods or service is on account of hindrances beyond the control of the selected bidder to be determined by OCAC.
  - a) The supplier/ selected bidder(s) shall request in writing to OCAC giving reasons for extending the delivery period of service, if he finds himself unable to complete the supply of goods or service within the stipulated delivery period or is unable to maintain prorate progress in the supply of goods or service delivery. This request shall be submitted as soon as a hindrance in delivery of goods and service occurs or within 15 days from such occurrence but before expiry of stipulated period of completion of delivery of goods and service after which such request shall not be entertained.
  - b) OCAC shall examine the justification of causes of hindrance in the delivery of goods and service and the period of delay occurred due to that and recommend the competent authority on the period of extension which should be granted with or without liquidated damages.
  - c) If the competent authority agrees to extend the delivery period/ schedule, an amendment to the contract with suitable denial clauses and with or without liquidated damages, as the case may be, shall be issued. The amendment letter shall mention that no extra price or additional cost for any reason, what so ever beyond the contracted cost shall be paid for the delayed supply of goods and service.
  - d) It shall be at the discretion of the competent authority to accept or not to accept the supply of goods and/ or services rendered by the contractor after the expiry of the stipulated delivery period, if no formal extension in delivery period has been applied and

granted. The competent authority shall have right to cancel the contract with respect to undelivered goods and/ or service.

IV. In case of extension in the delivery and/ or completion period is granted with full liquidated damages, the recovery shall be made on the basis of following percentages of value of goods which the selected bidder has failed to supply or complete : -

Condition
<sup>•</sup> delay in delivery of materials beyond the delivery schedule mentioned in the rk order, LD @ 0.25% per week or part thereof for the pending materials order ue up to maximum 5% will be deducted.
r

- a) The maximum amount of liquidated damages shall be 5 % of the total order value.
- b) OCAC reserves its right to recover these amounts by any mode such as adjusting from any payments to be made by OCAC to the bidder.

# 7.4 Service Level Agreement and Penalties

S. No.	Activity	Timeline	Penalty
1.	Delay in Delivery/ Supply of Hardware/Equipments	As per Delivery / Project Implementation schedule mentioned in this Document	<ul> <li>0.5% of Contract value of delayed item per week or part thereof for delay in delivery (Here Contract value of delayed item means value of individual delayed items as per financial bid)</li> <li>If the successful bidder delays the delivery /supply beyond 60 days from the scheduled date of delivery as per project implementation timeline then the OCAC/IGR may terminate the contract and Forfeit the PBG.</li> </ul>

# RFP for Selection of System Integrator for Supply, Installation, Commissioning & 2023 Maintenance of CCTV Surveillance System at all SROs

2.	Delay in Installation &	-Do-	✓ 1% of Contract value of
	commissioning		delayed item per week or
			part thereof for delay in
			Implementation
			•
			✓ If the successful bidder
			delays the installation and
			commissioning beyond
			120 days for from the
			scheduled date of
			installation and
			commissioning as per
			project implementation
			timeline then the
			OCAC/IGR may terminate
			the contract and Forfeit
			the PBG

#### Note:

- I. Maximum Penalty cap for penalty for delay is 10% of contract value (i.e. total capex cost) for the ordered item.
- II. If there is a delay in delivery of the supply of hardware, applicable penalty for delay in delivery of delayed/non-supplied hardware will be levied. Due to delay in delivery, if installation gets delayed further applicable penalty for delay in installation and commissioning will also be levied for that non-supplied and non-installed hardware.
- III. If OCAC/IGR fails to provide space and related clearances to carry out the job as per the agreement terms, as a result of which the installation of the equipment is delayed and the selected agency is not able to adhere to the schedule for completing the Acceptance Tests. Delay solely on account on above will not be accounted while ascertaining actual delay and penalties thereof.
- IV. For calculation of delay any dependencies from SR office level will be excluded.

# 7.4.2 During O&M Phase

S. No.	Activity	Target SLA	Penalty
1.	Timeline for Retrieval of video	Retrieval of Event	✓ Rs. 500 for every
	feeds from the Storage	Related	instance of late
		(Flagged/marked	retrieval as per the
		by the IGR or its	SLA
		user department)	
		video feeds from	

		the Local storage: Maximum Retrieval time 5 seconds. Retrieval of Non- Event (Anything which is not flagged / marked) related video feeds from Local Storage: Maximum retrieval time 5 minutes.	Request Through a
2.	Uptime of all IT components installed at site	99 % (at each individual component level)	<ul> <li>For each component</li> <li>✓ Above 99% = No penalty.</li> <li>✓ &gt; 98.50% &amp; &lt;99%= 0.25% of EQI</li> <li>✓ &gt;98 &amp; &lt;=98.50% =0.5% of EQI.</li> <li>✓ &gt;97 &amp; &lt;= 98% =1.0% of EQI.</li> <li>✓ &gt;96 &amp; &lt;=97% =1.5% of EQI.</li> <li>✓ Less than 96.00% - =2% of the EQI.</li> <li>Note: If the uptime goes below 95% consequently for two quarters, then in that case OCAC/IGR may terminate the contract and forfeit the PBG.</li> </ul>
3.	Availability of Video Recording	100% (365 x 24 hours) Excluding power cut duration & Schedule Maintenance duration	A penalty of Rs. 1000/- per camera per hour or part thereof shall be levied in case of unavailability of Video Recording
4	Uptime of Application	99.9%	A penalty of 0.20 % EQI per hour or part thereof shall be levied in case of

	un	availability of	VMS,
	CC	C Application,	Video
	An	alytics	

# Note: Maximum Penalty cap for operational penalty is 10% of overall contract value for the ordered item.

# 7.5 Dispute Resolution Mechanism

The Bidder and OCAC shall endeavor their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:

- I. The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within seven (7) days of receipt of the notice.
- II. The matter will be referred for negotiation between OCAC and the Authorized Official of the Bidder. The matter shall then be resolved between them and the agreed course of action documented within a further period of 15 days.
- III. In case it is not resolved between OCAC and the bidder, it will be referred to Principal-Secretary to Govt., (E&IT Department)., Govt. of Odisha for negotiation and his decision would be final and binding for both the parties.
- IV. In case any dispute between the Parties, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Bhubaneswar and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re- enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.
- V. The "Arbitration Notice" should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one
- VI. party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.
- VII. Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides. The Bidder shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions of the

Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

# 7.6 Notices

Notice or other communications given or required to be given under the contract shall be in writing and shall be faxed/e-mailed/hand-delivery with acknowledgement thereof, or transmitted by pre-paid registered post or courier or email.

# 7.7 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or OCAC as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

- i. Natural phenomenon, including but not limited to floods, droughts, earthquakes and epidemics
- ii. Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos
- iii. Terrorist attack, public unrest in work area provided either party shall within 10 days from occurrence of such a cause, notifies the other in writing of such causes. The bidder or OCAC shall not be liable for delay in performing his/her obligations resulting from any force majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions relating to indemnity, confidentiality survive termination of the contract.

# 7.8 Failure to agree with Terms and Conditions of the tender

Failure of the successful bidder to agree with the Terms & Conditions of the tender shall constitute sufficient grounds for the annulment of the award, in which event OCAC shall invoke the EMD/PBG of the selected bidder and may award the contract to the next best value bidder (R2) or call for new proposals from the interested bidders.

# 7.9 Limitation of Liability

Except in cases of gross negligence or willful misconduct: -

- a) neither party shall be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier/ selected bidder to pay liquidated damages to the Purchaser; and
- b) the aggregate liability of the selected bidder to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the amount specified in the Contract, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier/ selected bidder(s) to indemnify the Purchaser with respect to patent infringement.

# 7.10 Change in Laws & Regulations

- I. Unless otherwise specified in the Contract, if after the date of the Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Odisha/ India, where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/ or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract.
- II. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited, if the same has already been accounted for in the price adjustment provisions where applicable.

# 7.11 Change Orders and Contract Amendments

- OCAC may at any time order the selected bidder through Notice in accordance with clause "Notices" above, to make changes within the general scope of the Contract in any one or more of the following:
  - a. drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
  - b. the place of delivery; and
  - c. the related services to be provided by the selected bidder
- II. If any such change causes an increase or decrease in the cost of, or the time required for, the selected bidder's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery and Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the selected bidder for adjustment

under this clause must be asserted within thirty (30) days from the date of the selected bidder's receipt of the Purchaser's change order.

III. Prices to be charged by the selected bidder for any related services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the selected bidder for similar services.

#### 7.12 Delivery of Goods

The bidder shall deliver all the equipment at OCAC/bidder warehouse at Bhubaneshwar and after verification/inspection, the bidder should deliver the equipment at respective location without any additional cost.

#### 7.13 Transportation

Where the bidder is required under the Contract to transport the goods to field offices. Transport to such places including insurance, as specified in the Contract, shall be arranged by the bidder and the related cost shall be included in the Contract Price.

#### 7.14 Legal Jurisdiction

All legal disputes are subject to the jurisdiction of Bhubaneshwar courts only.

#### 7.15 Taxes and Duties

The rates quoted shall be in Indian Rupees without including all GST, other taxes, levy, and royalties etc. The prevalent GST rates which will be allowed to be charges as per applicable rules. Rate quoted would be paid up to the completion of the job. Any increase in the quoted rates is not allowed in any circumstances. However, any change in the central and state taxes including the GST rates shall be borne by the department as applicable during the contract period.

#### 7.16 Binding Clause

All decisions taken by the Department regarding the processing of this tender and award of contract shall be final and binding on all concerned parties.

# 7.17 The Department Reserves the Right

To verify, modify, revise, amend or change any of the terms and conditions mentioned above or during the tender process. However, once the contract has been signed between the parties, then any such modification, revision, amendments in the terms and conditions shall be deduced in writing and signed by both the parties.

THE DECISION REGARDING ACCEPTANCE OF TENDER BY THE DEPARTMENT WILL BE FINAL. Conditional tender shall be summarily rejected.

The Department is free to phase out the work if it feels it is necessary.

#### 7.18 Bidder's Integrity

The bidder is responsible for and obliged to conduct all contract activities as defined in the scope of work in accordance with the Contract with utmost integrity and sincerity.

#### 7.19 Bidder's Obligations

The bidder is obliged to work closely with the Department's staff, act within its own authority.

The bidder will abide by the job safety measures prevalent in India and will free the Department form all demands or responsibilities arising from accidents or loss of life the cause of which is the bidder's negligence. The bidder will pay all indemnities arising from such incidents and will not hold the Department responsible or obligated.

The bidder is responsible for managing the activities of its personnel and will hold itself responsible for any misdemeanor.

The bidder will treat as confidential all data and information about the Department, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Department.

Any deviation beyond the bidder's control to be reported to the Department on a monthly basis and decision to be obtained. Failure will lead to imposition of penalty as defined above and ultimately may lead to termination of contract with forfeiture of Performance Guarantee.

#### 7.20 Exit Management

- 1. If the bidder wishes to terminate the contract before its expiry he should seek permission in writing from the Department, clearly stating the reasons for the same.
- 2. The bidder shall continue to provide undisputed services at all locations up to 6 months thereafter or until it gets written approval of the Department.
- 3. The Department reserves the right to engage an alternative agency to take over the work from the successful bidder. The bidder shall hand over the operation and facilitate smooth transfer of responsibilities.
- 4. The bidder shall continue to provide the O&M support up to the period as mentioned above.

- 5. In case so decided, the OCAC/IGR retains the right to take over the equipment and site from the bidder based on a value to be determined based on depreciated value. The government may engage a consultant to carry out the valuation.
- 6. The Operation & Maintenance period of contract shall be for a term of minimum five-years after Go-live of services from all *identified SROs*. However, Department may extend the term of the contract for further 3 years upon successful completion of the five-year term. The terms and conditions of the extension shall be mutually discussed and agreed at that time.

#### 7.21 Performance Security

The proceeds of the performance security shall be payable to the Department as compensation for any loss resulting from the bidder's failure to complete its obligation under the contract. The Performance Security shall be denominated in Indian Rupees and shall be issued by any Scheduled Bank in India.

Bidder shall furnish a Bank Guarantee from any Scheduled Commercial Bank for 3% of total contract value for period of the contract or 5 years six months which-ever is later.

# 8 Technical Specification

#### 8.1 Equipment Technical Specification

# 8.1.1 CCTV Camera

#### **OEM Criteria:**

1. CCTV OEM should have direct presence in India from last ten years (not as joint venture, partnership firms or through any other association) & manufacturing in India since last five years not as joint venture, partnership firms or through any other association. Foreign CCTV OEM should have manufacturing unit globally from last 10 years as on date of bidding. Documentary evidence should be submitted.

2. The camera OEM must submit declaration regarding their own manufacturing setups and shall not have 3rd party manufacturing from any company blacklisted in India or any company sharing land border with India. The source code of firmware/software etc. should not reside in countries sharing land borders with India. OEM should submit supporting document to establish proof of this eligibility criteria.

3. Bid should be compliant to the Policy and Make in India makes shall be given preference as per Order 2017-Revision vide the Department of Industrial Policy and Promotion (DIPP) Order No. P-45021/2/2017-PP(BE-II) dated 16th September,2020 or latest. OEMs under make in India must submit Undertaking and supporting documents.

5 MP IP Dome Camera					
S. No.	Parameter	Specification	Compliance (Yes/No)	Remarks	
1	Video Compression	H.265 & H.264 (H.265/HEVC and H.264/AVC Certificate to be submitted at the time of submitting bid)			
2	Video Resolution	2592 × 1944 or better			
3	Frame rate	2592 × 1944 @ 20 FPS			
4	Video Bit Rate	Constant bit rate, variable bit rate (250kbps-16Mbps)			
5	Image Sensor	1/2.5" Progressive scan CMOS			
6	Lens Type	Varifocal Motorized with Remote Focus & Zoom			
7	Lens	2.7-13.5mm Motorized Lens			
8	Electronic Shutter	1~1/100000s			
9	Multiple Streams	Main Stream: 20fps@(2592x1944), 30fps@ (2048x1536, 1920x1080, 1280x960, 1280x720) Sub Stream: (704x576, 640x480, 640x360) @30fps; Third Stream: (1920x1080, 1280x720, 704x576)@30fps			
10	Minimum Illumination	Colour: 0.001Lux @ (F1.2, AGC ON), 0.008 Lux @ (F1.4, AGC ON), B/W: 0 Lux with IR on			
11	IR Cut Filter	Automatically Removable IR-cut filter			
12	Day/Night Mode	Yes, with IR Cut Filter.			
13	S/N Ratio	≥ 55 dB			
14	Auto adjustment + Remote Control of Image settings	Brightness, Sharpness, Contrast, White Balance, Exposure Control, Backlight Compensation, Gain Control, 3DNR, HLC, Defog, ROI.			
15	Wide Dynamic Range	True WDR 120 dB or better			

16	Privacy Masks	Minimum 4	
17	Audio	line in and line out, G.711/ G.726,	
		External microphone input, External	
		line output	
18	Local storage	SD Card support up to 256GB	
19	Protocol	IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP,	
		RTSP, RTMP, HTTP, HTTPS, DNS,	
		DDNS, DHCP, FTP, NTP, SMTP, SNMP	
		V1/v2, SNMP v3, UPnP, Bonjour,	
		PPPoE, VLAN, 802.1x, QoS, IGMP,	
		ICMP, ONVIF Profile S & G.	
20	Alarm I/O	Minimum 1 Input & 1 Output	
		contact for 3rd party interface	
21	Operating	As per city Ambient conditions in all	
	conditions	seasons	
22	Interface	RJ 45, 100 Base TX	
23	Humidity	Humidity 10-95% RH (Non-	
		condensing)	
24	Casing	IP66/IP67/NEMA 4X, IK10	
25	Certification	CE, FCC, RoHS & BIS/UL	
		Note: In case of Make in India	
		Product UL certification is not	
		required.	
26	Power	PoE IEEE 802.3af/ POE+ IEEE 802.3at	
		and 12VDC/24AC/24VDC	
27	IR illuminator	Internal IR Illuminator with range of	
		30 meters based upon requirement	
		of site/focus/area of interest.	
28	General	OEM of the camera should not be	
	Security	blacklisted in India or anywhere	
		globally for security reasons from	
		any organization including ONVIF.	
		OEM Should be ONVIF Full Member	
29	OEM should have	ve ISO 9001, 14001, 27001,45001 &	
	ISO/IEC 27032:20	)12	

# 8.1.2 Bullet Camera (2 MP IP Bullet Camera)

S.	Parameter	Specification	Compliance	Remarks
No.			(Yes/No)	

1	Video	H.265 & H.264 (H.265/ HEVC and	
	Compression	H.264/AVC Certificate to be	
		submitted at the time of submitting	
		bid)	
2	Video	1920 X 1080 or better	
	Resolution		
3	Frame rate	1920x1080 @ 25/30 FPS	
4	Video Bit Rate	Constant bit rate, variable bit rate	
		(250kbps-8Mbps)	
5	Image Sensor	1/2.7" or Better Progressive scan	
		CMOS or better	
6	Lens Type	Varifocal Motorized with Remote	
		Focus & Zoom	
7	Lens	2.7~13.5mm	
8	Electronic	1 sec ~ 1/100,000 sec	
	Shutter	, ,	
9	Multiple	Mainstream:	
	Streams	2MP(1920×1080)@25/30fps	
		Sub Stream: D1 (704x576)/ CIF	
		(352×288) @15FPS	
		Third Stream: VGA (640X480)/CIF	
		(352×288) @15FPS	
10	Minimum	Color: 0.01 Lux @F1.2, B/W: 0.001	
	Illumination	Lux@F1.2, 0 Lux at IR ON	
11	IR Cut Filter	Automatically Removable IR-cut	
		filter	
12	Day/Night	Yes, with IR Cut Filter.	
	Mode	,	
13	S/N Ratio	≥ 55 dB	
14	Auto	Brightness, Sharpness, Contrast,	
	adjustment +	White Balance, Exposure Control,	
	Remote Control	Backlight Compensation, Gain	
	of Image	Control, 3DNR, HLC.	
	settings		
15	Wide Dynamic	True WDR 120 db or better	
	Range		
16	Privacy Masks	Minimum 4	
17	Audio	Full duplex, line in and line out,	
- ´ ′		G.711/ G.726, External microphone	
		input, External line output.	
18	Local storage	SD Card support up to 256GB.	

10	Distant		
19	Protocol	TCP/IP, IPv4,Ipv6, RTCP, NTP, UPnP,	
		SMTP, FTP, ICMP, HTTP, HTTPS,	
		HTTP, DHCP, DNS, DDNS, RTP, RTSP,	
		IGMP, IP Filter, SNMP V1 & V2,	
		ONVIF Profile S & G.	
20	Alarm I/O	Minimum 1 Input & 1 Output	
		contact for 3rd party interface	
21	Operating	As per city Ambient conditions in all	
	conditions	seasons	
22	Interface	RJ 45, 100 Base TX	
23	Humidity	Humidity 10-95% RH (Non-	
		condensing)	
24	Casing	IP66/IP67/NEMA 4X, IK10 or Better	
25	Certification	CE, FCC, RoHS & BIS/UL	
		Note: In case of Make in India	
		Product UL certification is not	
		required	
26	Power	PoE IEEE 802.3af/ POE+ IEEE 802.3at	
		and 12VDC/24AC/24VDC	
27	IR illuminator	Internal IR Illuminator with range of	
		50 meters based upon requirement	
		of site/focus/area of interest.	
28	General	OEM of the camera should not be	
	Security	blacklisted in India or anywhere	
		globally for security reasons from	
		any organization including ONVIF.	
		OEM Should be ONVIF Full Member	
29	OEM should have	/e ISO 9001, 14001, 27001,45001 &	
	ISO/IEC 27032:20		
			I

# 8.1.3 8 Channel NVR

S. No.	Parameter	Specification	Compliance (Yes/No)	Remarks
1	Operating system	Embedded Linux		
2	Video channels Support	Minimum 8 Channel		
3	Storage	Should support 2 SATA hard disk slot and each should support 10TB HDD		

Image and Video specification	<ul> <li>H.265 &amp; H.264 (H.265/ HEVC and H.264 /AVC Certificate to be submitted at the time of submitting bid)</li> <li>Video Input – 8 IP camera minimum</li> <li>Video Resolution: Support up to 4K Resolution</li> <li>Adjustable Image Quality</li> <li>Support 396(22*18) surveyed area can be set in every screen and multi- level sensitivity adjustable</li> <li>Matrix Display: 1/2/4/8</li> </ul>		
Physical Ports	Video Output: 1ch VGA and 1ch HDMI (4K) Audio Interface: 1ch In & 1ch Out Network: 1 RJ45, 10M/100M LAN port Alarm Interface: 1ch In & 1ch Out USB Port: 2# USB2.0 ports		
Recording and playback	Should support schedule, motion and alarm-based recording Incoming/Outgoing Bandwidth should be 100 Mbps or better Synchronous Playback Time/Date based search mode Alarm based search		
Security Mode	Authorized username and password, HTTPS with password, RTSP Validation		
Network Protocols	IPV4, TCP/IP, HTTP, HTTPS, FTP, DHCP, DDNS, RTSP, PPPoE, NTP, UPnP, SMTP		
Backup	Should Supports data transfer via USB & Network for easy and fast backup of data.		
User Management	User add, delete, modify, permission management, Support dual password authentication, zero passage, Auxiliary users (secondary password protection)		
	Video specification Physical Ports Physical Ports Recording and playback Security Mode Security Mode Network Protocols Backup User	VideoH.264 /AVC Certificate to be submitted at the time of submitting bid)Video Input – 8 IP camera minimumVideo Input – 8 IP camera minimumVideoResolution: Support up to 4K ResolutionAdjustable Image QualitySupport 396(22*18) surveyed area can be set in every screen and multi- level sensitivity adjustableMatrix Display: 1/2/4/8Physical PortsVideo Output: 1ch VGA and 1ch HDMI (4K)Audio Interface: 1ch In & 1ch Out Network: 1 RJ45, 10M/100M LAN portAlarm Interface: 1ch In & 1ch Out USB Port: 2# USB2.0 portsRecording and playbackShould support schedule, motion and alarm-based recordingIncoming/Outgoing pased searchSecurity ModeAuthorized password, HTTPS with password, RTSP ValidationNetwork ProtocolsIPV4, TCP/IP, HTTP, HTTPS, FTP, DHCP, DDNS, RTSP, PPPoE, NTP, UPnP, SMTPBackupShould Supports data transfer via USB & Network for easy and fast backup of data.User ManagementUser add, delete, modify, permission management, Support dual password authentication, zero passage, Auxiliary users (secondary	Video specificationH.264 /AVC Certificate to be submitted at the time of submitting bid)Video Input – 8 IP camera minimumVideo Input – 8 IP camera minimumVideo Input – 8 IP camera minimumVideo May Support up to 4K Resolution: Support up to 4K ResolutionAdjustable Image QualitySupport 396(22*18) surveyed area can be set in every screen and multi- level sensitivity adjustableMatrix Display: 1/2/4/8Physical PortsVideo Output: 1ch VGA and 1ch HDMI (4K)Audio Interface: 1ch In & 1ch OutNetwork: 1 RJ45, 10M/100M LAN portAlarm Interface: 1ch In & 1ch OutUSB Port: 2# USB2.0 portsRecording and playbackShould support schedule, motion and alarm-based recording Incoming/Outgoing Bandwidth should be 100 Mbps or betterSynchronous PlaybackTime/Date based search mode Alarm based searchSecurity ModeAuthorized username and password, HTTPS with password, RTSP ValidationNetworkIPV4, TCP/IP, HTTP, HTTPS, FTP, UPnP, SMTPBackupShould Supports data transfer via USB & Network for easy and fast backup of data.User ula password authentication, zero passage, Auxiliary users (secondary password protection)

	User Interface	IPhone, Android Phone Support	
12	Operating Temperature	AC 110-240V/ DC 12-48V Supply or OEM should give appropriate power supply	
		Operating: -10° to +50° C Humidity: 10% to 90% (non- condensing)	
13	Certifications	CE, FCC, RoHS & BIS/UL Note: In case of Make in India Product UL certification is not required	
14	Compatibility	All the cameras and NVR from Same OEM	
15	OEM should ha	ave ISO 9001, 14001, 27001,45001 & 2012	

# 8.1.4 8 Port POE Switch

Features	Specification	Compliance	Deviations
Hardware Features	Minimum 8 No's of 10/100/1000 Base-Tx PoE / PoE+ ports,2x Class 6 PoE ports supporting up to 60W per port (Duplex, Full, Half) and 2 x 1G Uplink port		
	Switch should provide 240W of PoE budget with support for 802.3at standard		
	All ports should have features of auto- negotiate, flow control (802.3x), port-based network access control (802.1x), port security, MAC filtering etc.		
	Minimum Switching capacity of 20 Gbps or more		
Software Features	Should be IPv4 and IPv6 ready from day one		
	Should have IGMP snooping v1, v2, v3 & MLD snooping v1, v2 supporting min 100 multicast groups		
	Features of DHCP (including option 82), DHCP Relay   NTP or equivalent, SNMPv1, v2 & v3, TELNET/ SSH		

Enclosure	IP-30	
Power Supply	Switch should have Dual redundant DC power supply inputs.	
	security. Web/SSL, Telnet server/SSH, ping, traceroute, Simple Network Time Protocol (SNTP), Trivial File Transfer Protocol (TFTP), SNMP, RADIUS, syslog, DNS client, protocol-based VLANs, LLDP, Loop protection.	
	Port-based and 802.1Q tag-based VLANs, Q in Q Vlan Switch should support L2/L3 ACL for added	
	Switch should support STP, RSTP, MSTP & Ring protection for <50ms failover.	
	IP Source guard, Unicast, Broadcast & Multicast storm control	
	Multilevel security on console access to prevent unauthorized users from altering the switch configuration	
	based on the MAC address of a user's device. The aging feature to remove the MAC address from the switch after a specific time to allow another device to connect to the same port.	
	Control Protocol (LACP) Port Security to secure the access to a port	
	Support for IEEE 802.3ad Link Aggregation	
	management, CLI and web based GUI for easy management	
	Should have console port for administration &	

## 8.1.5 24 Port Switch at District Control Room

Features	Specification	Compliance	Deviations
Hardware	Minimum 24 No's of 10/100/1000 Base-Tx PoE /		
Features	PoE+ ports (Duplex, Full, Half) & 4x1/10 Gig SFP+		
	Ports.		
	Switch should provide 370W of PoE budget with		
	support for 802.3at standard		

	All ports should have features of auto- negotiate, flow control (802.3x), port-based network access control (802.1x), port security, MAC filtering etc.	
	Minimum Switching capacity of 128 Gbps or more	
Software	Should be IPv4 and IPv6 ready from day one	
Features	Should have IGMP snooping v1, v2, v3 & MLD snooping v1, v2 supporting min 100 multicast groups	
	Features of DHCP (including option 82), DHCP Relay  NTP or equivalent, SNMPv1, v2 & v3, TELNET/ SSH	
	Should have console port for administration & management, CLI and web based GUI for easy management	
	Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
	Port Security to secure the access to a port based on the MAC address of a user's device. The aging feature to remove the MAC address from the switch after a specific time to allow another device to connect to the same port.	
	Multilevel security on console access to prevent unauthorized users from altering the switch configuration	
	IP Source guard, Unicast, Broadcast & Multicast storm control	
	Switch should support sFlow to give complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats.	
	Switch should support STP, RSTP, MSTP & Ring protection for <50ms failover.	
	Port-based and 802.1Q tag-based VLANs, MAC- based VLAN, Guest VLAN, Private VLAN, also known as protected ports, with multiple uplinks, Q in Q Vlan	
	Switch should support L2/L3 ACL for added security.	

Web/SSL, Telnet server/SSH, ping, traceroute,	
Simple Network Time Protocol (SNTP), Trivial File	
Transfer Protocol (TFTP), SNMP, RADIUS, syslog,	
DNS client, protocol-based VLANs, LLDP, Loop	
protection, Cable diagnostic.	

# 8.1.6 24 Port Distribution Switch at Central Command & Control Center

Features	Specification	Compliance	Deviations
Hardware	Switch with at least 24 X 10/100/1000BASE-T		
Features	Ports and 2 x 10G Base-T and 4 X10G SFP+ Ports		
	Switch should have console port for accessing		
	the CLI of the switch.		
	Switch should have RJ-45 port for out-of band-		
	management port		
	Switch should have USB port for connecting a USB storage device		
	Switching capacity should be 168 Gbps or higher or non-blocking architecture		
	Switch shall have 64 Bytes packet forwarding rate should be 125 Mpps or higher or non- blocking architecture		
	Switch MAC table should be at least 16K or higher		
	Switch should be standard 19-inch 1U rack mountable		
	Switch should support internal/external redundant power supply for 1+1 redundancy and load sharing		
	Physical stacking Up to 9 units per stack & Single IP Management (SIM) Up to 32 units per virtual stack		
	Switch should have one AC power with 100 to 240 VAC, 50/60 Hz, power supply should be supplied with switch from day 1		
	Operating temperature should be 0 to 50 °C		
	Certification: FCC Class A, CE Class A, VCCI Class A, CB, cUL,		
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol		

	Should support BPDU Filter, BPDU restriction, Root restriction	
	Should support Loopback detection (LBD) to	
	detect the loop created by a specific port	
Software Features	Should support IGMP Snooping v1/V2/V3 & IGMP groups 1K or more IGMP groups and require support for IGMP Snooping Fast Leave	
	Should support MLD Snooping v1/v2 & MLD group 1K or more and require support for MLD Snooping Querier.	
	Should support 16 L3 IP interfaces and IPv4/IPv6 Loopback interface	
	Should support IPv6 Neighbor Discovery (ND)	
	Should support VRRPv3, Equal-Cost Multi-Path (ECMP) and UDP helper.	
	Should support Static route for both IPv4 and IPv6, RIP V1/V2/ng.	
	Should have Policy-based Route (PBR)	
	Switch should support IEEE 802.1Q VLAN with different type of VLAN like Port based, Voice VLAN, Private, Double (Q-In-Q), Multicast VLAN (ISM VLAN for IPv4/IPv6), 802.1v Protocol VLAN, VLAN Trunking, Super VLAN	
	Should have per-port broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance	
	Should support port security to secures the access port based on MAC address	
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan, TCP SYNFIN, Ping of Death Attack and TCP Tiny Fragment attack	
	Should support DHCP snooping and DHCP server screening, DHCP server	
	Should support 802.1X port based and 802.1X host-based access control, Identity-driven Policy	

(VLAN, ACL or QoS) Assignment	
Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port	
Different type of QoS priority like Strict Priority Queue and Weighted Round Robin, Strict + WRR, Congestion control using Weighted Random Early Detection (WRED) or WTD	
Should support Remark 802.1p priority, Remark ToS/DSCP and Rate limiting in Policy map	
Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON)	
Support for DHCP Client support for IPv4/IPv6, DHCP server, DHCP Relay and DNS client	
Should have SNTP/NTP protocol for time synchronization	
Should support CDP/UDLD, Link Layer Discovery Protocol (LLDP) and LLDP-MED	

# 8.1.7 1 KVA UPS

Features	Specifications	Compliance	Deviation
UPS Capacity	1 KVA On-Line UPS System with Inbuilt		
	Isolation Transformer		
Туре	True On-Line Double Conversion UPS		
	with PWM-IGBT technology.		
Power factor	1 KVA/800 VA@ 0.8 p.f.		
Input Voltage	Input: 160-280 V AC, UPS should have		
	inbuilt 1 Phase, Type 2 surge arrester		
	(50kA) and Lightning Protection device.		
Output Voltage	Output: 230 V AC, 1-phase ± 1% (Sine		
	Wave Output), 50 Hz ± 0.05 Hz		
Frequency	Frequency Range (Synchronized		
	Range): 47~ 53 Hz		

	Frequency Range (Batt. Mode): 50 Hz ±	
	0.25 Hz	
	Harmonic Distortion: o ≤ 3 % THD	
	(Linear Load) $o \le 6$ % THD (Non-Linear	
	Load)	
Isolation	UPS output should be fully isolated by	
	double conversion and inbuilt isolation	
	transformer within the UPS cabinet	
	itself. External transformer shall not be	
	considered.	
Display	Digital LCD display for measurement of	
	AC Voltage, Battery voltage, Battery	
	Current, Load Current, Output	
	frequency.	
Backup Time	The system must be capable of	
	providing requisite battery back-up	
	time of 1 hour using Sealed	
	Maintenance Hybrid Gel Battery.	
Battery Bank	Battery bank and VAH to be sized for 1-	
	hour back-up on full resistive load	
Certification	CE Certification	
	ISO 9001, ISO 14001 certified	
	Power Management from SNMP	
	Manager and Web Browser	
	Bidder Should Submit the MAF of UPS	
	and UPS Battery both at the time of	
	bidding.	

# 8.1.8 Workstations

Features	Specifications	Compliance	Deviations
Processor	Intel i7 Latest Generation (Processor should		
	have been released on or after Q1 of 2020)		
Memory	Minimum 16 GB DDR4-2666 Memory expandable		
	upto min. 32 GB		
Integrated	Dedicated (Non-Shared with Processor)		

# RFP for Selection of System Integrator for Supply, Installation, Commissioning &2023Maintenance of CCTV Surveillance System at all SROs

Intel Graphics	8GB Graphics Card	
Card		
HDD	500 GB SSD & 500 GB SATA Harddrive@7200rpm	
Media Drive	16XDVD <u>+</u> RW	
Network	1000 BaseT, Gigabit Ethernet (10/100/1000	
interface	autosensing)	
Audio	Line/Mic IN, Line-out/Spr Out(3.5mm)	
USB ports	Minimum 6 USB ports (out of that 2 in front). Out	
	of 2 USB port in front, Minimum 1 USB Port in	
	front shall be USB3.0	
Keyboard	104 keys minimum OEM keyboard	
Mouse	2 button optical scroll mouse (USB)	
Monitor	Two 21-inch monitor, Minimum 1920x1080	
	resolution, TCO 06(or higher) certified	
Operating	Latest 64 bit licensed Microsoft Windows	
System	operating system with media as per proposed	
	solution	
Warranty	5 Years Comprehensive onsite OEM Warranty	
	from the date of Go-Live	

### 8.1.9 Rack Server

Features	Specifications	Compliance	Deviation
CPU	2 x X-86 latest generation processor with		
	minimum 32 Core per processor and min 2.0		
	GHz		
Chipset	Intel chipset compatible with the offered		
	processors		
Internal	The server should Support upto 8 hot-		
Storage	swappable SAS and SSD drives.		
	Server should be configured with 4 Nos 1.6 TB		
	Write-Intensive SSD drives, the server be		
	proposed with 2* 480 GB M.2 SSD boot drive		
	with HW RAID Controller		
	Server should be configured minimum with		
	minimum 4GB of Flash backed write cache		
	module.		
Memory	Minimum 512 GB DDR4 Memory with support		
	up to 3200 MHz speed		

Momony Slots	32 DIMM sockets	
Memory Slots		
Memory	Up to 1.5 TB with 24x 64 GB LRDIMMs/	
Upgradability	RDIMMs	
Memory	ECC, Memory Mirroring / Memory Sparing	
Protection		
Support		
Controllers	PCIe 4.0 12Gbps SAS Hardware Raid Controller	
	with minimum 4GB cache, supports Hardware	
	RAID 0, 1, 5	
Graphics	16MB DRAM	
Controllers		
I/O Adapter	The server should have redundant dual port	
	10/25G Ethernet & redundant dual ports	
	32Gbps FC adapters to provide adapter level	
	redundancy.	
Ports	One USB 3.0 Port	
Operating System	Microsoft Windows Server 2016 and 2019 and	
Support	latest, Red Hat Enterprise Linux 7.x and latest,	
	SUSE Linux Enterprise Server 12.x and latest,	
	VMware vSphere 6.x and latest etc.	
Management	dedicated OOB management module with	
5	remote presence enablement (graphics,	
	keyboard, mouse and virtual media)	
Security Features	Rack Mount, 2U (max) chassis with security	
	bezel and Bezel Locking Kit, Common Criteria	
	certification, TPM (Trusted Platform Module)	
	2.0 or higher.	
	System remote management should support	
	browser based graphical remote console along	
	with Virtual Power button, remote boot using	
	,	
	USB/CD/DVD Drive. It should be capable of	
	offering upgrade of software and patches from	
	a remote client using Media/image/folder; It	
	should support server power capping and	
	historical reporting and should have support	
	for multifactor authentication.	

## 8.1.10 Fire Alarm System

SI. No.	Parameter	Compliance (Yes/ No)	Remarks
Α	General Requirements		

1		
1	Conventional Fire Alarm Panel with support for 2	
	Zone or more, in-built auto-dialler (4G GSM and	
	PSTN support), in-built TCP/IP Communication	
	Module, Tactile Keypad for easy operation, CE	
	Certified (Integrated with Video Surveillance	
	System through NVR)	
2	Multi-Criteria Detector with accessories - 5 Nos.	
	and Manual Call Point - 2 Sets to be installed in	
	each location	
3	Hooter cum Strobe with separate power supply	
	and inbuilt Li-ion Battery to ensure function even	
	in case of power failure - 1 No. to be installed at	
	each site	
4	At least 10% spares to be delivered to ensure	
	proper maintenance.	
B	Technical Requirements	
1	Fire Alarm Panel should provide LED indication of	
	system and individual zone status. 16*2	
	characters LED display or	
2	better	
Z	Fire Alarm should have in-built UPS type	
2	SMPS with inbuilt battery charger	
3	Fire Alarm should have in-built transient	
	protection for power supply and mother board.	
4	Fire Panel should have tactile keypad for	
5	easy panel operation.	
5	Fire Alarm Panel should have facility to	
6	detect hooter tamper Fire Alarm Panel should have internal memory	
0	for logging at least 200 events	
7	Fire Panel should have in-built Inbuilt TCP/IP	
	module	
8	Fire Alarm System should be installed and wiring	
0	should be done as per OEM guidelines and same	
	should be certified by OEM	
С	OEM Criteria	
1	OEM should have ISO 9001, ISO 14001 and ISO	
	27001 certification and direct presence in India.	
2	OEM of Fire Alarm System should have supplied	
2	Fire Alarms to at least 1 Central/State/PSU	
	institution in the last 3 years.	

3	OEM of Fire Alarm system should confirm integration with offered Video Surveillance System (through Network Video Recorder) for single dashboard alarm monitoring at District and State Control Rooms. OEM of CCTV system also should confirm compatibility with offered Fire Alarm System on letterhead.	
4	OEM/Authorized Distributor of OEM should have direct presence in Orissa along with Helpdesk	
	and dedicated support technicians for providing	
	remote and on- site service support.	
5	MAF from OEM of Fire Alarm is mandatory. MAF	
	should confirm back-to-back support for the	
	entire duration of the project lifecycle.	

# 8.1.11 IP PBX System

SI.	Description	Specification Parameter	Compliance	Remark
No.			(Yes/No)	
1	IP Telephony	The IP telephony system must be based on		
	System	a pure IP technology that is a software-only		
	Architecture:	solution. The IP telephony system must		
		support unified communication (UC) server		
		& gateways architecture for SIP, Digital and		
		Analog trunks connectivity. The system		
		must be capable of supporting Analog,		
		Digital, IP Telephones, and SIP based video		
		desk phones. Card based solution is not		
		acceptable for SIP phone and SIP trunk		
		registration.		
		The communication servers must work in		
		an Active-Active redundancy mode. If any		
		Server Fails in the Cluster adjacent server		
		should automatically take the load of the		
		failed sever along with load of gateway and		
		end points without breaking on-going calls.		
		Redundant Server/Hot stand-by mode of		
		working is not acceptable. Open source		
		asterisk software based solution should not		
		be accepted.		
		Both servers must be provided in a cluster		
		mode. If one cluster server fails, the other		
		cluster servers in the network must be able		

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		to take the complete load of the calls automatically (without any manual intervention) and without dropping any existing calls (IP, TDM & PRI) or data (CDR, CTI). The OEM offered unified communication and call manager application must have valid trademark registration certificate as per Govt. of India trademark act 1999, Section 23, rule No. 62(1). Vendor will submit a copy of the same certified by		
		OEM. Commercial off-the-shelf Servers should be used for telephony system. OEM made or proprietary servers will not be accepted. Card based processor servers or PCM/TDM legacy systems with card-based processor systems are also strictly not allowed. Telephony system should use Linux Operating System.		
		Vendor must submit valid latest Type test TEC-GR (Vide TEC-GR spec. No.: TEC/GR/SW/PBX-005/01/SEP.2016) (Generic Requirement) approval certificate issued by Telecommunication Engineering Centre (TEC), Department of		
		Telecommunication, Govt. of India tested with IPv4 & IPv6 for both SIP terminals and SIP Trunks from days 1 for the particular model of IP-PBX with Server & Media Gateway system quoted. Notarized copy of the same is required to submit along with the technical bid.		
2	Scalability	The system must be scalable to at least 25,000 endpoints in single cluster architecture. The proof of reference document from OEM is mandatory to be submitted along with technical bid.		
3	System Security	Administration of the system should be using HTTPS System should use TLS to encrypt SIP, HTTP, FTP and SRTP & SRTCP to encrypt RTP and RTCP.		

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4	System	System administration should be web	
	Administration	based.	
		All programming of system should be done	
		through a web-based GUI interface.	
5	Certification	The OEM must have ISO 9001, ISO 45001,	
		ISO 270001 and ISO 90003 certification in	
		all the company's activities. Valid duly	
		certified copies of the same is required to	
		be submitted along with technical bid.	
6	Emergency	The Emergency conference	
	Conference	communication should be supplied and	
		installed as per below specification.	
		Emergency conference resource should be	
		provided from the same telephony system	
		OEM and have the facility to automatic dial	
		out to connect up to 120 participants in a	
		single conference. System should also have	
		120 party managed meet me conference. It	
		should be possible to further divide 120	
		party conference bridge into any	
		combination like 10 X 10 party, 5 x 20 party	
		etc. if required. The meet me conference	
		should be secured means to enter to the	
		conference bridge; the user should enter	
		the password.	
7	Soft Client	The soft client should be from the same	
	(Mobile/PC)	OEM of IP telephony system. Wi-Fi facility	
		for smart phone to be provided by the	
		customer. Soft client should be available	
		for latest Windows PC, Android Phone and	
		IOS phone. It should be freely	
		downloadable from Google Play store /	
		Apple store	
		It should support following features: Make	
		a call, Hold, Retrieve, Transfer, Video Call,	
		Presence (User Select) – Change Status:	
		Available, Meeting, DND etc. Dial users'	
		number - Internal, External, Mobile.	
8	Help desk	The Help desk solution must be embedded	
		within the same servers, not installed on a	
		separate server and should be from the	
		same OEM of the telephony system. The	
		help desk facility must be supplied by	

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		vendor within the same UC call manager	
		application from day1. The system must be an All-in-one solution	
		that provides a one server solution for	
		UC&C. 5 agent license along with one	
		supervisor should be supplied and installed	
		for help desk solution.	
9	PRI Gateway	PRI gateway should have Configuration –	
5	Thi Gateway	1X PRI (30 Channels) and should be from	
		the same OEM of telephony system.	
		Voice Processing – G.711, G.729A, G.723.1,	
		GSM, iLBC; echo cancellation: G.168 with	
		64ms echo tail; dynamic jitter buffer; VAD	
		and CNG	
		PSTN – ISDN PRI standard: ANSI, NI-2, DMS,	
		5ESS	
		Ethernet – RJ-45, 10/100/1000 Base-T	
		Power Input – Dual AC, power supply in	
		redundancy, 2U chassis	
10	Integrated	The proposed voice mail (4 Channel) must	
	Voice Mail	be embedded within the platform, not	
	specification	installed on a separate server and should	
		be from the same OEM of the telephony	
		system and should be activated by licenses	
		only. The user should be able to review	
		voice message from his phone. Voice mail	
		should support message wait indication.	
		Should support below mentioned Unified	
		Messaging Features: User should be able to	
		listen to, delete, save, reply to and forward	
		through the phone	
		Visual voice mail on soft phone - User	
		should be able to play, save and delete the	
		voice message from the soft phone.	
		Fax-to-Mail	
		Messages to email	
		Multilingual Support	
		MWI – Message Waiting Indication	
		Voicemail Activation via Soft Keys	
		Users should be able to check and handle	
		voice messages from all devices, including	
		the email client and telephone.	

		Voicemail should support the following:	
		Microsoft Exchange	
11	Operator	SIP phone for operator console should be	
	Console	from the same OEM of IP telephony system	
	Specification	3.7" 360 x 160-pixel graphical LCD with	
		backlight LED for call and message waiting	
		indication. 6 line keys including up to 21	
		programmable features keys with (20	
		physical dual-color LED keys/40 additional	
		keys can be added via a page Switch Dual-	
		port Gigabit Ethernet, built in PoE. PC	
		Based operator console with Windows PC	
		an all accessories.	
		Placing calls (dialing) and answering calls	
		Putting calls on hold and retrieving held	
		calls.	
		Call transfer to a specified destination, or	
		to the voice mailbox	
		Consultation calls (switching between held	
		parties) 3 - way conference calls	
		Call muting	
		Voice paging	
		Camp-on	
		Do Not Disturb (DND)	
		The User interface client of the PC operator	
		console must be based on Window XP or	
		higher.	
		The Operator console must be able to	
		indicate their presence to the other	
		operators	
		The Operator console must be able to	
		change status (i.e. On Line, Do Not Disturb	
		or In a Meeting).	
		The operator must be able to search the	
		history of call activities via pull-down	
		menus that show incoming and outgoing	
		calls The operator must be able to sort and	
		export the call History to an Excel spread	
		sheet.	

## **SIP PHONE**

SIP Phone	SIP phone should be from the same OEM
	of IP telephony system. Minimum

128x48-pixel or more graphical LCD with backlight	
2 VoIP accounts, 4 soft keys, 4 Function keys (Phonebook, MWI, Headset, Redial), SRTP/ HTTPS/ TLS, 802.1x, IPv4 / IPv6	
Codec: G.722, G.711, G.726, G.729, G.729A, iLBC, opus Full-duplex hands-free speakerphone	
Dual-port Gigabit Ethernet, PoE	

# 8.1.12 32" LED TV

Features	Specification	Compliance	Deviation
Display Size	<ul> <li>32-inch FHD LED screen for display</li> <li>Panel technology: IPS/VA</li> </ul>		
Support	Wall Mount & Table Mount		
Speaker	2 x 10W		
Socket	<ul> <li>USB: 2.0x1</li> <li>HDMI: 2</li> <li>LAN: 1</li> <li>RS 232 In</li> <li>Built in Wi-Fi</li> </ul>		
Features	<ul><li>Internal memory: 8GB</li><li>USB Plug &amp; Play</li></ul>		
Power Supply	• Voltage : 100-240V		
Certification	<ul> <li>EMC- FCC Class A / CE</li> <li>Energy star</li> </ul>		
Warranty	Onsite 3 years		

#### 8.1.13 50" LED TV

Features	Specification	Compliance	Deviation
Display	<ul> <li>50-inch UHD LED screen for display</li> <li>Brightness: 350 nits or Better</li> <li>Contrast Ratio: 4000:1 or Better</li> </ul>		
Support	Wall Mount & Table Mount		
Speaker	2x10W		

Socket	• USB: 2.0 x 1
	• HDMI: 3
	• LAN: 1
	• RS 232 In
	Built in Wi-Fi
Features	Creston Connected (Network
	Based Control)
	Real time Clock
	NTP Sync timer
Power Supply	Voltage : 100-240V
Warranty	Onsite 3 years

# 8.1.14 Indoor Video Wall (2x2) at Central Location

Parameters	Specification Descriptions	Compliance (Yes/ No)	Remarks
Overview	The displays shall utilize direct LED lit LCD panel		
Display	technology with a "Typical" lifetime rating of		
	$\geq$ 100K hours, with a matrix in 2(C) and 2(R)		
	The screens shall be able to aligned physically auto		
	organize the position on the video wall		
	All panels shall of 55" diagonal size with bezel-less		
	design to have seamless technology with only		
	0.88mm gap between two panels		
Native	In order to achieve acceptable image quality for		
Resolution per	both video and graphics, and to avoid pixel loss,		
Panel	the LCD panel must be of native resolution of 1920		
	x 1080.		
Aspect Ratio	16:9, Color temperature upto 10500 K can also be		
	set for camera application		
Backlight	Direct LED with 500 Nits of brightness and ≥100K		
	Hours lifetime of LED minimum		
Brightness	The "Typical" Luminance specification must be 500		
	Cd/m2 (nits) or higher with a "Typical" Static		
	Contrast Ratio of 1100:1 or greater in normal		
	operation.		
Viewing angle	Each display shall utilize a high contrast screen		
	(anti-glare) with sizes of 55" diagonal. The screen		
	shall have a H 178°/V 178° viewing angle or greater		
	with a screen "haze" value of 28% or greater for		
	wide viewing angles for operators.		

Automatic	Each LCD Panel must have Built-in light and colour	
colour and	sensors with feedback loops to keep display	
brightness	performance, such as luminance and colour,	
adjustment.	uniform in time across the entire display wall. The	
	sensors must measure both brightness and colour.	
	Human intervention should not be involved	
Input signal	The LCD panels shall have digital input connectivity	
flexibility	options, including, but not limited to, HDMI, full	
	Display Port and IP inputs supporting up to Quad	
	HD resolutions at 60fps or higher.	
	Each LCD panel shall have the ability to "loop-	
	through" any selected digital input signal via a	
	DP1.2 connection	
Connectivity	2x DP1.2 , 2x HDMI2.0 , 2x USB , 2x LAN, HDCP 2.2	
Ethernet ports	2	
Redundant	Yes, Optional	
Hot-	<i>,</i> 1	
swappable		
Power supply		
(External)		
Service	Front Access only	
Design	Power and i/p board outside panel and can be	
0	replace in less that 2min	
	Integrated Power and Input board inside the panel	
	is not acceptable	
Illumination	Each LCD Panel shall be equipped with Direct LED	
	illumination. The LEDs should have a "Typical"	
	lifetime rating of ≥100K hours in normal operation	
	for cost-effective operation.	
Redundant	Complete Video wall should be redundant and no	
wall	downtime to be there in case of power supply	
	failure	
Brightness	Uniformity level (measure considering 13-points)	
Uniformity	at least 98% or higher	
Humidity	upto 80% (non-condensing)	
OEM	EMC, CE, CB, UL, BIS and Class A EMC	
Certification	, , , ,	
	The Display Modules, Display Mount, Display	
	Controller & Software should be from a single	
	OEM.	
	OEM	

Panel	Each LCD panel shall be equipped with two (2)	
Automatic	built-in sensors, permitting the brightness level of	
Maintenance	each LED Backlight to be controlled and adjusted	
	automatically. Light intensity from each panel will	
	be monitored and adjusted automatically during	
	calibration. The brightness target can be changed	
	for the entire display wall via control	
	management software without having to	
	physically interact with each panel separately.	
Remote Power	The LCD panels shall have option to utilize an	
Supply	external remote AC-DC power supply. The remote	
Sappiy	power supply must be hot swappable and offer a	
	Redundancy option with Auto-failover capability.	
	The resulting system shall support Auto-failover	
	capability in case one of the internal AC-Dc would	
	fail. The remote power supplies shall support up	
	to 100 metres distances without any image	
	degradation or brightness loss from the LCD	
	panel.	
Signal	Each LCD panel shall have signal "cropping"	
cropping	capabilities allowing a single image to be	
cropping	displayed across the entire video wall array	
Remote	The control of the wall shall be possible via a	
Management	network. All LCD panels shall have their own IP	
Management	address, and the control software can access all of	
	them at the same time. The available features	
	shall be: On/Off, Brightness and Colour, Input	
	control	
Automatic	Each LCD panel shall be equipped with two (2)	
calibration	built-in sensors, permitting the brightness level of	
Calibration	each LED Backlight to be controlled and adjusted	
	automatically.	
Remote	The control of the wall shall be possible via a	
control	network. All LCD panels shall have their own IP	
	address, and the control software can access all of them at the same time. The available features	
	shall be: On/Off, Brightness and Colour, Input	
	control	
Sorvico 9		
Service &	Manufacturer design for long-term support in	
maintainability	terms of spare parts (manufacturer must	
	guarantee availability of parts for 3 years	

	The screens shall be able to auto organize the position on the video wall	
	The Software Should be able to Switch On & off	
	each Displays on site and remotely Switch On &	
	off the entire wall on site and remotely. Select the	
	input interface on site and remotely	
	System should be AI (Artificial Intelligence) with	
	Advance Pro-active real-time Monitoring and	
	Diagnosis of hardware over cloud for predictive	
Dealersaura	failure to have maximum uptime	
Replacement	< 5min	
of input		
board/power		
supply time EMC	LCD Panel should complies with EMC (Electro-	
Protection	Magnetic Compatibility) Standard	
	Magnetie compatibility standard	
	Class A and follows CE, FCC or UL	
	Emission: EN 55032: 2012	
	EN 61000-3-2: 2014	
	EN 61000-3-3: 2013	
	Immunity: EN 55024: 2010	
Safety	EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12:	
	2011 + A2: 2013	
	Auto sensing of physical alignment of video wall	
RoHS	EN 50581: 2012	
	Video Wall Controller & Software	1
Parameters	Specification Descriptions	
CPU	Minimum Intel <sup>®</sup> Xeon <sup>®</sup> Octa core or higher	
Memory	min. 32 GB RAM and expandable upto 64 GB	
Hard Disk	R.A.I.D-1 redundant setup with 2x 1000GB 2.5"	
	HDD Hard disk	
Cooling	Should be equipped with dual FAN for cooling	
Network	2x 1Gb/s LAN	
System	Min. 7x slot PCI Express backplane	
backplane	Lip to 8 HD displays	
Outputs	Up to 8 HD displays	

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Inputs	HDMI inputs; H.264 inputs from cameras at least	
	8 Full HD inputs @30 Hz simultaneously can be	
	shown	
Graphics Card	4ch Graphic card; Each port of graphics card	
	should support minimum 3840x2160 @60Hz	
	GPU Memory 5GB GDDR5 per Graphics Card to	
	have flicker free and smooth graphics	
	3840x2160@60Hz	
	Memory Bandwidth Up to 200GB/s per Graphics Card	
Operating	Memory Interface 160-bit per Graphics Card	
System		
Output	DP/DVI/HDMI	
Protocols	H.264, MPEG2/4, MxPEG, MJPEG, V2D, H.263,	
Supported	Screen Scrapping	
	Screen Scrapping via Freeware Software like VNC	
	is not at all acceptable	
Dimensions	19" Rack mount	
Operating	100-240V, 10-5A, 50/60Hz, Redundant Dual	
Conditions	Power supply	
Operating	0° to 40°C   32° to 104°F	
Temperature		
Humidity	Max. 80% Rh(noncondensing) @ 40°C	
Noise Level	Max. 50dbA (measured at 1m/3.28ft distance at 22°C/72°F)	
Regulation	UL, CB, BIS, FCC, CE, IEC-60950, IEC-62368	
Compliance		
Software	The software should be able to preconfigure	
	various display layouts and access them at any	
	time with a simple mouse click or schedule/timer	
	based.	
	The software should be able display multiple	
	sources anywhere on video wall in any size.	
	Key features of Video Wall management Software	
	Central configuration database	
	• Browser based user interface	
	• Auto-detection of network sources	
	• Online configuration of sources, displays and	
	system variables	

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Video Wall Control Software shall allow commands		
on wall level or cube level or a selection of cubes:		
• Switching the entire display wall on or off.		
• Setting all projection modules to a common		
brightness target, which can be either static (fixed)		
or dynamic to always achieve maximum (or		
minimum) common brightness between		
projection modules.		
Fine-tune colour of each cube		
Should support Multiple clients / Consoles to		
control the Wall layouts		
The Software should be able to share layouts b/w		
available different video walls on same network as		
well as preview of sources on the workstation		
Software should enable the user to display		
multiple sources (both local & remote) up to any		
size and anywhere on the display walls (both local		
& remote).		
The software should be able to create layouts and		
launch them as and when desired		
The Display Wall and sources (both local & remote)		
should be controlled from Remote PC through LAN		
without the use of KVM Hardware.		
Software should support display of Alarms		
The software should provide at least 2 layers of		
authentication		
Software should able to Save and Load desktop		
layouts from Local or remote machines		
All the Layouts can be scheduled as per user		
convince. Software should support auto launch of		
Layouts according to specified time event by user		
It should be possible to create layouts comprising		
of screen scrapped content of Workstations, DVI		
inputs, Web sources, URLs configured as sources.		
Layouts can be pre-configured or changed in real		
time Can be pre-configured or changed in real time		
It should be possible to schedule specific Layout		
based on time range It should be possible to share		
the layouts over LAN/WAN Network with Display		
in meeting room or on Remote Workstations		
connected on LAN/WAN Network		

	1	
	The system shall include complete Bi-directional	
	Soft KVM to permit operators to take mouse &	
	keyboard control of Displays, Screen Scrapped	
	applications and DVI source	
	It should be possible to create two separate Tickers	
	which run concurrently. These can be positioned at	
	top or bottom and can run independently	
	The system should have the capabilities of	
	interacting (Monitoring & Control) with various applications on different network through the	
	single Operator Workstation. It shall be possible to	
	launch layouts, change layouts in real time using	
	Tablet	
	The control of the wall shall be possible via a	
	network. All cubes shall have their own IP address,	
	and the control software can access all of them at	
	the same time. The available features shall be:	
	On/Off, Brightness and Colour, Input control.	
	Separate hardware server for monitoring features	
	Wall or Panel On/Off, Brightness and Colour, Input	
	control, health monitoring.	
	Alex astronom have factore to show manimum	
	Also, software have feature to show maximum,	
	minimum and current brightness / colour values of	
	all the projectors.	
	Central setup & Connection management, Central configuration database, Fully distributed &	
	modular component technology, Browser based UI, Auto-detection of network sources	
	Online configuration of sources, backup & restore,	
	Scheduled backup, Fully features web services	
	based API covering all legacy and encrypted	
	communications	
	Save and load layouts (complete display presets	
	including perspectives and applications), start stop	
	and position applications & sources freely over the	
	complete desktop, remote keyboard and mouse	
	control from and towards other networked	
	desktops (bi-directional)	
Modules	The Display Modules, Display Controller &	
	Software should be from a single OEM	

# 8.1.15 Online 5 KVA UPS

Features	Specifications	Compliance	Deviation
UPS Capacity	5 KVA On-Line UPS System with Inbuilt		
	Isolation Transformer.		
Туре	True On-Line Double Conversion UPS		
	with PWM-IGBT technology.		
Power factor	5 KVA/4.5 KW@ 0.9 p.f.		
Input Voltage	Input: 160-280 V AC, UPS should have		
	inbuilt 1 Phase, Type 2 surge arrester		
	(50kA) and Lightning Protection device.		
Output Voltage	Output: 230 V AC, 1-phase ± 1% (Sine		
	Wave Output), 50 Hz ± 0.05 Hz		
Frequency	Frequency Range (Synchronized		
	Range): 47~ 53 Hz		
	Frequency Range (Batt. Mode): 50 Hz ±		
	0.25 Hz		
	Harmonic Distortion: $o \leq 3 \%$ THD		
	(Linear Load) o ≤ 6 % THD (Non-Linear		
	Load)		
Isolation	UPS output should be fully isolated by		
	double conversion and inbuilt isolation		
	transformer within the UPS cabinet		
	itself. External transformer shall not be		
	considered.		
Mode of	Active-Passive Mode Deployment		
Deployment			
	Provides audio notification of changing		
	utility power and UPS power conditions		
	Periodic battery self-test ensures early		
	detection of a battery that needs to be		
	replaced		
Over-load	Auto over-load handling capacity		
Display	Digital LCD display for measurement of		
	AC Voltage, Battery voltage, Battery		
	Current, Load Current, Output		
	frequency.		

Backup Time	The system must be capable of providing requisite battery back-up time of 1 hour using Sealed Maintenance Free Batteries.	
Battery Bank	Battery bank and VAH to be sized for 1- hour back-up on full resistive load	
Certification	CE Certification	
	ISO 9001, ISO 14001 Certified	
	Power Management from SNMP     Manager and Web Browser	
	• Bidder Should submit the MAF of UPS and UPS Battery at the time of bidding	

#### 8.2 Functional Requirement Specification

#### 8.2.1 Central Video Management Software (CVMS)

Proposed Solution must have the following functional and technical capabilities.

#### **OEM Criteria:**

1. The Intellectual Property Rights & Source Code of Offered Central Video Management Software must not reside in a Country that is sharing Land Border with India.

The Central Video Management Software Offered should not be developed/manufactured by an entity in which the majority shareholding of the entity is from a Country sharing a Land Border with India.

2. The CVMS OEM should have following certifications.

A. ISO 9001:2015 Quality Management Certifications

B. 27001:2013 Information Security Management Systems Certifications

3. The CVMS OEM shall have a direct Registered Office in India without any Collaboration, Joint Venture & should be in Operational for the Last 10 Years as on the Last Date of Bid Submission.

SI. No.	Technical Parameters	Compliance	Remarks
		(Yes/No)	

2	The IP Video Central Management Software should allow Live Viewing and Management solution of Network Video surveillance systems & shall not have any Limit on the Number of Cameras to be Connected & shall be Scalable to Unlimited IP Cameras in Future by Augmentation of Camera channel Licenses & server Hardware Components. The Video Central Management Software shall be Client-	
	Server based IP Video security solution that shall provide seamless management of Digital Video, Audio and data across an IP network. The video management Software shall provide full virtual matrix switching and control capability. Video from sites shall be possible to view from single or numerous workstations simultaneously at any time. Cameras, recorders, and viewing stations may be placed across the terminal in the IP network.	
3	The Offered Application Software should be ONVIF S, G, T Profile Compliant.	
4	The IP Video Management Software shall be Licensed & Perpetual Licenses to be Provided, such that they are Valid for Lifetime.	
5	The Application can be accessed from Windows based computer and support web clients for Standard Web Browsers like Google Chrome & Microsoft Edge in desktop as well as mobile	
6	The Application shall support iPad, Android and iPhone devices & shall also support web clients for Standard Web Browsers like Google Chrome & Microsoft Edge.	
7	The Video Central Management System shall be a fully distributed solution, designed for limitless multi-site and multiple server installations requiring 24/7 surveillance with support for devices from different vendors. The Video Management System shall offer centralized management of all devices.	
8	The system shall be a scalable client – server architecture built using well known operating systems	
9	The system shall provide a powerful and efficient management interface for all the security systems across all monitored sites.	
10	The management server shall allow access to a system manager in the form of Configuration Client from where the administrator can configure and manage all servers, cameras and users.	

11	The Central VMS shall be based on a true open architecture	
	that shall allow the use of non-proprietary workstation and	
	server hardware, non-proprietary network infrastructure	
	and non-proprietary storage.	
	Recordings Features:	
12	Should support recording at H.265+, H.265, H.264, MPEG4	
	or MJPEG in at minimum 5 fps to 30 FPS at minimum CIF to	
	4K Resolution t NVR Side.	
13	Should Support RTP over UDP, RTP over TCP and http	
	streaming	
14	Should support dual streaming and recording at different	
	qualities of videos.	
15	Should have ability record audio along with video in same	
- 10	recording file.	
16	Option to define multiple recording paths	
17	Calculate storage size based on number of cameras, days	
	and drives available in the system	
18	Option to record at low frame(I-frame) and high frame rate	
	on Motion	
19	Export the desired portion of video in mp4, avi and asf	
	formats in DVD/USB or any external device. Viewing of this	
	recording must be playable on authorized player which	
	shall be provided by software manufacturer or in media	
20	player on OS Windows, Linux/Unix or Apple Mac.	
20	Export recording possible in client and remote PC also with proper authentication.	
21		
21	Option for Window-Pop up, Email, Sound alarm on recording/video loss or any event.	
22		
22	Storage and Bandwidth calculation: Recoding size estimation for each hard disk attached to the server.	
22		
23	The option of email Video Pop up on Low disk space event.	
24	The system should alert user on low disk space event.	
24	Export of videos Synopsis based on events in a particular	
25	time period	
25	Export of Signed video using public/private key.	 
20	Live, Playback & Zoom Features:	
26	Live View possible for minimum 64 cameras	
	simultaneously on 1 screen or multiple monitors using software video wall.	

27	Configurable Matrix views with size and number of cameras. Pre-defined views from full screen, 1x1 to 8x8 & User Defined Matrix.	
28	View sequencing with user driven time interval.	
29	Dual Streaming and Switching from Low to High Quality on Full screen mode.	
30	Option to change Live View directly from cameras or from VMS server using RTSP and HTTP options	
31	It should support live view and Playback from minimum 10 clients- Both local and remote	
32	It should support event-based playback.	
33	Ability to search based on Date/Time/Camera, Name, ID and Location for more than one camera simultaneously.	
34	Ø Digital Zoom:	
35	Both complete live picture and Zoomed picture should be visible simultaneously while zooming.	
36	Should be available On Live and Playback Videos.	
37	Zoom available on snapshots too.	
38	Software should allow creation of multiple camera sequences. It should be possible to set the dwell time for the cameras within the sequence.	
39	Software should allow sequences control (pause/play, skip forwards, skip backwards).	
40	Live view and Playback available at the same time with Playback window on top of live view window.	
41	Instant Playbacks available as window pop up on click of an event from Event Screen.	
42	Event window with specific snapshot of that event should be shown simultaneously in Live view screen. Clicking on the event should play recording of that event time.	
43	Image Enhancement available in Playback. Option to sharpen the video image through scrollbar.	
44	Playback Navigation Tree View with Recording server, camera list, year/months list and the date wise play list.	
45	Playback option for frame-by-frame	
46	Playback should have Video lock feature.	
47	Option of Common Timeline for syncing of multiple cameras while playback.	

# RFP for Selection of System Integrator for Supply, Installation, Commissioning & 2023 Maintenance of CCTV Surveillance System at all SROs

48	Ability to make bookmark of any portion of video and view list of all bookmarks			
49	Instant Playback and Quick Search of event-based recordings.			
50	Event based search: Event based Time line to quickly show coloured dots in Timeline and view recorded videos at the event time.			
51	Playlist with files listed for each date. User can click on a date to play recordings.			
52	E-map client should show icon blink and voice alert of the event.			
	Health and Alarms			
55	Automatic Health check-up and activation of optimization modules once CPU reached more than 85%.			
56	Any Video Loss/ Video Block /Motion Detection Alerts should be displayed on dashboard in real time.			
57	Recording Status of every camera should be there on Dashboard, in case of any failure in recording of any camera instant alert should be generated and sent via email etc.			
58	Hard Disk Status of every NVR should be there like, how much HDD connected with any NVR Device, Storage Capacity and Remaining Storage of any HDD.			
59	Network information of any NVR should be viewed centrally, IP address, Subnet Mask, gateway etc.			
60	Real time status of all camera connected with any NVR.			
61	Status Report of all NVR like Total Downtime, Uptime, Disconnected time etc.			
62	Any type of HDD Error in any NVR should be reported instantly to avoid important recording of evidence.			
63	Option to view cameras only on alarm. Matrix grid size should change automatically if alarms are generated from multiple cameras simultaneously			

## 8.2.2 AI Based Video Analytics

Proposed Solution must have the following functional and technical capabilities.

SI.	Parameter	Specifications	Compliance	Remarks
No.			(Yes/ No)	

1	Unified Platform for Deployment, Training, Scaling and Management of all the video Al related application and Hardware provisioning	Singular Unified Video AI Platform - The Platform shall be a singular and unified AI based Video Intelligence platform capable to run all the Surveillance, Suspect face, Employee Movement, Attendance, Frequent Person Visiting, and any other Video Analytics use cases on a single platform, namely -	
		Each of the video analytics use case shall be able to run on a unified video intelligence platform. Where the platform shall have the capability to support several multi-vendor/OEM video analytics applications that can be deployed on any camera or video- feed seamlessly.	
		Hardware Provisioning for Surveillance Application - The inferencing hardware provisioned to run the video analytics application should be common to all the applications irrespective of the type of architecture of deployment. Any application including but not limited to surveillance apps like FRS, person attribute etc. should be capable of running on any device be it a central server or an edge based device or LPU	
2	Dynamic Deployment	Each of the video analytics use-case shall be structured as an independent module that can be deployed on any camera using a simple user interface utility, providing a complete visibility of the use cases and which cameras they are running on. The platform should have utility of scheduling each use case on individual camera. The user should be able to easily select	

				<u>г</u>	
			the camera by tag, groups or locations		
			and schedule applications on any		
			camera.		
3	Advanced	AI	The Video Analytics system shall be		
	compatible		compatible with the latest		
			technological advancements in the		
			domain of computer vision and AI.		
			Hence, it shall be able to quickly adapt		
			to newer libraries and AI		
			advancements. All the analytics and		
			use-cases shall be based on advanced		
			AI technology, and shall not depend on		
			traditional algorithms.		
4	Libraries	and	The system shall be fully compatible		
	frameworks		with popular Computer Vision and		
			Artificial Intelligence frameworks		
			including but not limited to such as		
			OpenCV, Open VINO, Tensorflow,		
			CAFFE, Pytorch, MXNet, TensorRT,		
			Keras and Darknet from day one		
5	Training	new	The system shall allow seamless		
	models		training by labelling any objects within		
			the images and providing them		
			suitable attributes of multiple types		
			such as class, subclass, color, type etc.		
			The system shall allow training to		
			happen continuously, on demand or		
			on periodic intervals, which shall be		
			configurable.		

6	Annotation	The system shall have an inbuilt	
		annotation tool that allows a user to	
		label the images with relevant	
		information using both rectangle and	
		polygon drawing facilities.	
		The annotation should allow labelling	
		of images or drawn objects with	
		different class names. In case of	
		persons, it should also support	
		labelling of various attributes such as	
		color of clothing, type of clothing, age,	
		gender etc. as well.	
		The annotation tool should have a	
		comprehensive project management	
		feature, including assigning annotation	
		jobs on a set of images to individual	
		users. The system should also have	
		support for higher privileged users	
		who can approve/disapprove the	
		annotations done by the annotators.	
		The user should be able to train new	
		deep-learning models from the	
		annotated data using the Annotation	
		UI itself. The user-interface should	
		allow to plug-in the trained model in	
		any of the relevant Video Analytics	
		use-cases dynamically at each camera.	
		The system should allow the user to	
		plug newly trained AI models at	
		runtime by simply selecting the	
		models in the per-camera	
		configuration page	

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7	Model	The System shall have a library of	
	Comparison	standardized AI models developed by	
		the OEM of the Video Analytics	
		System, academic institutions and	
		members of the developer	
		community. These models shall be	
		used for comparing and benchmarking	
		the performance of newly developed	
		models. The system shall allow for	
		both qualitative and quantitative	
		comparison of models, i.e. it shall	
		allow the end user to compare	
		individual parameters of the model	
		(such as learning rate) as well as the	
		overall performance of the model on	
		any given dataset when compared to a	
		standardized model.	
8	Monitoring and	Autonomously objective metrics shall	
	analytics	be available to be evaluated and	
	,	Insights into the performance of each	
		algorithm, model and their versions	
		shall be made available to key	
		, stakeholders or users as defined.	
		Visual map of composition, workflow,	
		usage analytics, resource utilization,	
		failure points etc. would be made	
		available to provide complete control	
		of A.I. workload.	
9	Unsupervised	The system shall be able to use	
5	deep learning	algorithms and unsupervised deep	
	methods	learning methods to provide alerts and	
		useful actionable insights from live	
		streaming video feed data. System	
		shall have capability to automatically	
		analyse hours of video data for	
		defining own rule.	
		denning own rule.	

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10	Self-learning	The system shall be capable of fully	
	Capabilities	self-learning with no initial	
		programming input by the end user.	
		The solution shall learn what normal	
		behaviour is for people, vehicles,	
		machines, etc. and the environment	
		based on its own observation of	
		patterns of various characteristics such	
		as size, speed, reflectivity, color,	
		grouping, vertical or horizontal	
		orientation and so forth.	
11	Key UI View and	The System shall provide the following	
	functionalities	key results from the use case	
		Event Notifications: The result of each	
		of the use case shall be in the form of	
		events that contain the screenshot	
		with other metadata describing the	
		event, such as detected objects,	
		timestamp, camera/video that	
		generated the event and all other	
		metadata representing the event from	
		different use cases. The User Interface	
		shall have a grid and list view with all	
		the events from different use cases,	
		cameras etc. These features should be	
		supported through a mobile	
		application to be utilized by various	
		field users.	
		The system should support	
		customization of alerts, video feeds,	
		and priority-based alerts for individual	
		. ,	
		users from day one.	
		Resource Management View: The User	
		interface shall provide a list of all the	
		resources available in the system such	
		as computing servers and cameras.	
		The status of each of the devices,	
		whether they are online/offline shall	
		also be available at all times.	

AI Training Tool: The User interface
shall have a training tool to annotate
and label images from the events to
train new AI models and update the
existing ones. The training tools shall
also contain a list of all the models
available in the system, which can be
plugged into any AI use case easily.
Use case deployment matrix: The user
interface shall have a matrix to assign,
start, stop and schedule any use case
on any camera. The status of active
and non-active use cases shall be
clearly visible with color coded
information.
All the lineways should be able to
All the licenses should be able to
operate in floating mode for all
cameras.
Data Analytics Dashboard: The user
interface shall also have an analytics
dashboard listing all the patterns of
events from different cameras with a
heat-map of number of events on an
hourly basis.
Picture Intelligence Unit – UI Interface
and Functional requirements:
Video Intelligence platform should
have inbuilt intelligence capabilities to
deliver the analytics requirement of
the PIU. This is envisaged to be a video
forensic unit/ R&D Setup for Video
Content Analysis. It will use live
camera feeds, criminal and crime
scene photographs/ videos etc. as
evidence. It will ensure video analytics,
continuous time stamp and non-
tampering of electronic evidence as
per laws.
pci iaws.

		Video Synopsys UI- The Video Intelligence shall provide an intuitive UI for Vide Synopsys. Able to analyse all the recorded video files and provide the operator with synopsis video for quick review and investigation thereby	
		reducing viewing time considerably. The video files from all the 3rd Party Video Management Software (VMS) shall be supported.	
12	Common UI for all the use-cases	The user interface shall be a unified dashboard that shows events from all the Video Analytics use- cases and all the cameras in a common UI, and which gets populated in real time from event notifications.	
13	Web based Interface	The User interface of the system shall be a web/system interface (As per the solution, OEM has to provide appropriate interface to meet our SLA) that can be accessed from any system in the local area network with login credentials. It shall allow multiple users to log in at the same time, and receive real-time alerts and notifications	
14	Live Video Interface	The User interface shall allow a user to view the live video stream from any camera with overlaid information of regions, objects, people and vehicles based on each of the use-case	
15	Configuration per- use-case per- camera level	The system shall allow each use-case to be uniquely configured for every individual camera stream, with parameters for camera calibration, image quality improvement, night/day settings etc. Each use-case shall be able to run on different cameras with different settings (e.g., different Zones for Intrusion, different lines for line crossing detection, etc.) at different hours of the day.	

		The configuration page shall allow a	
		user to choose any of the available AI	
		models for VA Use Cases. The	
		description of the models shall clearly	
		specify performance and hardware	
		requirements of each of the model	
16	Key configuration	The use case on each camera shall	
	parameters	allow setting up configuration of	
		multiple detections zones such as lines	
		and regions that can be used to define	
		perimeters, regions of interest.	
		The configuration user interface shall	
		allow adjusting various sensitivity and	
		confidence parameters to adjust each	
		video-analytics use- case's	
		performance with respect to the	
		physical deployment of the camera.	
17	Filtering and	The system shall allow a user to filter	
	Retrieval	and retrieve all the events based on	
		any combination of the following	
		parameters:	
		- Time of the event	
		- Objects in the event	
		- Type of the use-case	
		- Camera Location etc.	
18	Transparent and	The architecture shall clearly	
	Open Architecture	demonstrate the technology stack	
		with layers of the core platform, data	
		governance and interface to different	
		software applications.	
19	Highly parallel and	The algorithms powering the video	
	distributed	intelligence system shall possess	
		capability to operate parallel and	
		distributed manner across a cluster of	
		machines. Both training of AI	

algorithms and inference shall be

distributed.

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20	User Management	The system shall support user with a	
		hierarchical access level, with different	
		access level for different users	
		demarcated with respect to cameras,	
		locations and the data. The user access	
		control system shall allow setting of	
		SOP's like CRUD (Create, Read, Update	
		and Delete) operations for each user.	
21	Deployment of	The system shall allow deployment of	
	use-case across	any use case on any camera without	
	any camera	any MAC level or IP level locking.	
		Ideally any use case shall be	
		deployable and redeploy able on any	
		camera or video source as far as the	
		camera view supports such use cases	
		to be deployed.	
22	Video	The System shall be a real-time video	
	Compatibility	analytics engine that utilizes advanced	
		image processing algorithms to turn	
		video into actionable intelligence. The	
		AI based Video Analytics system shall	
		consist of video-processing & analytics	
		engine that works seamlessly both on	
		saved videos or camera streams in	
		real-time and provide events to the	
		user based on the use-case basis. The	
		system shall be compatible with all	
		ONVIF compliant IP cameras with	
		H.264/H.265 video decoding.	
23	Centralized	All the video streams shall be	
	Deployment	processed centrally at the Data Centre	
	Support	with one or more servers for video	
		processing. The user shall be able to	
		log in to the system through the	
		central dashboard to access all the	
		data from all the servers. The	
		processing of videos as well as alert	
		generation shall be done on premise.	
		At no point in time shall the data from	
		the site be shared over the internet or	
		sent over to the cloud. The System UI	
	l	shall only be accessible using	

		workstations and terminals available	
		on premises.	
24	Support for third-	The AI system shall also support third-	
	party use-cases	party developed algorithms and use-	
		cases that can provide the user with a	
		large base of use-cases to choose	
		from.	
		If a new use-case needs to be	
		developed based on Video	
		Intelligence, the system shall provide a	
		developer Software Development Kit	
		(SDK) for this purpose. The SDK shall be	
		provided along with detailed	
		documentation for building end-to-	
		end use-cases on the system.	
		The system shall also allow the user to	
		plug different AI models in the	
		individual running of the video	
		analytics use-case.	
25	Flexible	The technology stack shall be modular	
	Technology Stack	and scalable based on containerized	
		micro services. Each use- case shall be	
		orchestrated as a stand-alone micro	
		service, which communicates with a	
		central server for exchanging of the	
		data.	
		A.I. micro services components shall	
		be agnostic to language used in	
		technology stack. It shall work with any	
		language, framework, and library of	
		choice without any impact on the rest	
		of the architecture. This type of	
		flexibility will ensure lower friction for	
		collaboration and deployment of AI.	

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		Algorithms being containerized shall	
		ensure both interoperability and	
		portability, allowing for code to be	
		written in any programming language	
		or any version of library and	
		framework but then seamlessly	
		exposes a single API to be integrated	
		and ported with multiple modules/AI	
		components of diverse stack. It shall	
		seamlessly integrate with other	
		components and shall be portable/	
		replicable easily across the machines	
26	General VA	automatically.	
26		The Video Analytics shall be based	
	specifications	upon Machine Learning and Deep	
		Learning framework.	
		To save the duplication of the video	
		storage, the analytics should flag the	
		video for the configurable duration of	
		time pre and post event in the Video	
		Management System. It should be	
		possible for the operator to jump to	
		the alert flag in the archived video for	
		detailed investigation of the event.	
		It shall be possible to run the analytic	
		as per hourly/daily/weekly schedule.	
		There should be a provision to define	
		multiple such schedules. It should be	
		possible to set the schedule to any	
		analytic use case. It should be possible	
		to assign multiple analytics on the	
		same camera.	
		It is possible to generate email or a text	
		message to the designated recipients	
		in case critical alerts are generated.	
		The application shall escalate the alert	
		to the designated users through email	
		or a text message in case the alert is	
		not acknowledged by the operator in a	
		specified period of time.	
		It shall enable common configuration	
		settings in a batch mode on multiple	
		cameras.	

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		The application shall allow searching	
		the analytics events based on priority,	
		date and time (from and to) and	
		camera. It should be possible to	
		generate statistical analysis of various	
		use cases across the time of the day.	
		The analytics shall enable the operator	
		to define an unlimited number of	
		detection regions per camera. The	
		system shall allow setting each region	
		independently to be 'Active for	
		Analytics' for any given period of time	
		of the day.	
		The analytics events shall be stored in	
		the database. In case the events are	
		purged, the purged events stored to	
		external files for later reference.	
		For Vehicular and ANPR Analytics, it is	
		possible to deploy the analytics in	
		centralized architecture where all the	
		feeds from the cameras are available	
		in the Data Center and analysed	
		centrally.	
		The system shall have a single client	
		application for setting analytics, live	
		viewing, archived viewing and the	
		administrator functions.	
27	VA output	Accuracy may be evaluated using	
	Accuracy	following KPIs:	
	Parameter	a. Detection Rate (> 99%)	
		b. True Positive Rate + True Negative	
		Rate (>95%)	
		c. False Positive Rate (<5%)	
		d. False Negative Rate (<5%)	

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		There should have feature to improve	
		the accuracy overtime with further	
		continuous learning and also based on	
		the input received from the field	
		officer's incident reports (captured by	
		the system and matrix generated	
		through the system rather than the	
		manual exercise) and improvement of	
		AI models. The OEM should take this	
		feedback and upgrade the algorithm to	
		show accuracy improvement quarterly	
		basis.	
App S	pecification - Fac	ial Recognition Based Attendance	
Manag	•		
1	App detection	The app should be able to	
		automatically mark the attendance of	
		registered employees using Facial	
		Recognition.	
2	Entry/Exit location	The app should maintain a record of	
	and time	the entry /exit times as well as	
		entry/exit locations of each employee	
		based on First In Last Out basis.	
3	App Reporting	The app should be able to generate	
		reports of employees attendance for	
		different days of the month as well as	
		different days of the year.	
4	Adding Faces	The process of adding faces to the	
		system for face profiles.	
		registration should be seamless with	
		the user being able to register a new	
		face by uploading images of different	
Facial D	Detection & Recognit	ion System	
1.	Detection	Face Recognition System shall work on	
		real time and offline mode for	
		identifying or verifying a person from	
		various kinds of inputs from digital	
		image file and live video source from	
		any IP video streaming sensor like IP	
		Camera, Body Worn Cameras, Mobile	
		handset cameras, UAV/Drones etc.	
3.	Live and Offline	FDS shall be able to capture face	
	Mode	images from live & pre-recorded CCTV	
		feeds received	
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4	Detections		
4.	Detections in	The system shall be able work to	
	crowd	detect more than 20 faces in crowd on	
		moderate face rotation either	
		horizontal or vertical. It should support	
		a yaw angle of -40 to +40 degrees, a	
		pitch angle of -30 to +30 degrees and a	
		roll angle of -30 to +30 degrees.	
5.	Detection of	<b>5</b> 1	
	partial faces	with varying angles from multiple	
		videos simultaneously from Video	
		clips, Group Photographs and VMS	
		Playback directly from FRS Client	
		Interface. FRS shall be able to process	
		uploaded pre-recorded video feeds	
		with a speed of up to X20, depending	
		on the proposed hosting hardware and	
		the video quality	
6.	Ability to add	The system shall be able to add	
	reference Images	photographs obtained from law	
		enforcement agencies to the criminals'	
		repositories tagged for sex, age, scars,	
		tattoos etc. for future searches.	
7.	Support for	The system shall support diverse	
	cameras/video	graphic & video formats as well as live	
	formats	cameras. FRS shall support day/night	
		operation with ability to detect faces	
		both in colour and in black/white	
		mode by using any H.264, H.265 Fixed	
		IP and PTZ Cameras with IR	
		Illuminators without any special	
		configurations required	
8.	User-	FRS must support a user management	
	management	module that enables different user	
		level groups to support various	
		permission levels.	
		FRS client shall have ability to share	
		recognition data like images & videos	
		with multiple users and operators for	
		better reference, alarm & incident	
		management.	
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9.	Image	FRS system must have capability to	
	Enhancement	enrol whatever images fed in the	
	Capabilities	system with image enhancement and	
		ability to verify the quality of the	
		enrolled images with different colour	
		indicator for low quality images	
		enrolled in watch list/database.	
10.	Image Format	The system shall be able to utilize any	
	support	of the file formats like JPEG, PNG,	
		BMP, TIFF etc. format for enrolment.	
11.	De-duplication	FRS shall be able to check if new	
		enrolled face is already enrolled in the	
		database before registering the new	
		enrolled face in the system. Also, the	
		system shall be able to find a previous	
		detection of a POI (person of interest)	
		upon enrolment to watch list	
		(retrospective search) in less than 2	
		sec.	
12.	Enrolment of	The system shall have option to	
12.	faces	automatically enrol face images from	
	laces	CCTV cameras/video source. This	
		functionality should also be provided	
		5	
		platform in addition to the FRS	
		application.	
		The system should also have an option	
		for Bulk Enrolment either from file	
		system or a 3rd party databases such	
		as UID, SAARTHI, IT, NCRB, EPIC etc.	
13.	Categories of	The system shall have capacity to	
	database faces	create different categories of people	
		with option to customize the matching	
		threshold for different categories.	
14.	Full HD Support	The system shall be able to work on full	
		HD Camera video with maximum	
		performance.	
15.	Implementation	The system shall be able to be	
		implemented on IT hardware like	
		Server or Workstation.	
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16.	OS Support	The FRS algorithm should be able to use proven open-source tools and technologies like Linux to bring down the total cost of ownership of the solution. FRS running on any other OS should be supplied with Pre-Licensed Server based latest version OS like Microsoft Server 2016 and Microsoft	
17	Database Support	SQL as needed by the application The system shall employ database system like MS SQL/ MYQL/ Leading Open-Source Database/Sybase/ Mongo DB/ Postgres/Oracle etc. The FRS system should natively integrate with Video Intelligence platform and use a common database of the platform, so that common queries can be made on the common database for faces detection and other events.	
18	Algorithm Benchmarking	The Vendor should have any performance benchmarking certificate. NIST certificate will be preferred.	
19.	Performance	The system must perform a full 1: N search of the probe image in under 5 seconds against a database of up to 50 Mn face records.	
20.	Mobile Application Support	FRS Software vendor shall have mobile application of the same FRS software to support iOS and android based smart field devices. Mobile application shall be capturing the face of suspect in field and sending back to the FRS server for matching. Matching result shall be shown on the mobile application screen with matching score. There shall be provision in mobile application to stream mobile device camera as video streamer.	
21.	Detection robustness	System shall be able to detect the faces across the multiple CCTV video sources for online (real-time) and	

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		offline modes regardless of following conditions:	
		a. Changes in Facial expression	
		b. Changes in facial hair or hairstyle	
		c. Changes by moderate aging (up to	
		15 years)	
		d. Partially hidden faces or occluded	
		faces like wearing dark glasses mask	
		etc.	
		e. Changes in lighting conditions	
	earch	Simple Search UI that facilitates quick	
Ca	apabilities	and easy access to the collection of	
		events recorded by the system without	
		the constant monitoring by operators	
		and must perform a full 1: N search of	
		the probe image in under 2 seconds	
		against a database of up to 5-8 Million	
	-	POIs. It shall support following	
		a. Search previous events by images	
	-	from previous detections	
		b. Search previous events by images	
	-	uploaded by operator	
		c. Search previous events by enrolled	
	r	names	
		d. Search previous events by date and	
	-	time	
		e. Search previous events by watch list	
	-	group	
23. Re	atrospactiva	f. Search in Watch list by image	
	etrospective earch	FRS shall have capability of Search backwards for previous detections	
	Carch	and/or recognitions (events) of the	
		detected person without enrolment	
		from live CCTV & other forensic videos	
		/ offline videos	
24. U	Ip to 5 nearest	FRS shall have ranking features to	
	natches support	show next 5 closest & similar subjects	
		in the Watch list with nearest score to	
		the detection. This option enables you	
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		to review POIs that are potential	

		matches for this detection for efficient	
		system performance.	
25.	OEM owned	The FRS OEM should have ownership	
_	algorithm	of Face Recognition Engine /Algorithm	
		for any custom specific development	
		as required by client	
26.	Map feature	FRS must allow tracking of person on	
		maps to be uploaded in the system for	
		cameras connected to FRS and shall	
		highlight the camera location on the	
27		map for each detection/alert.	
27.	SDK/API for	FRS shall provide an SDK/API for	
	integration	integration with any third-party software like C4I (Command,_Control	
		Communication & Compute Center).	
		API must be available with a full set of	
		documentation of each method with	
		accompanying sample code. All FRS	
		function shall be fully accessible via	
		API.	
28.	Video Alert	FRS shall be able to play a short video	
		clip of the moment of face detection	
		without dependency on VMS which	
		can be downloaded/exported/saved	
29.	Timeline of	for evidence proof	
29.	detections	FRS shall provide timeline sequence of all detections of subject with date,	
		time & location.	
30.	Email Integration	FRS shall support email Alerts via	
		Gmail, Outlook or via an Exchange	
		SMTP service. Different recipients can	
		be defined for different Camera	
		Groups. User shall be able to define	
		how frequently recognition/detection	
		emails are sent, the email subject and	
		the email sender (among other things).	
		The email itself includes the	
		timestamp of the detection, the score, the description, the reference image	
	1	I the description, the reference inage	

		(defined in the Watch list) and the detected image.	
31.	Minimum hardware support	FRS Application Engine must be able to run a minimum of 20 FRS Camera Channels per Server. (Server with 128 GB RAM, 3 NVIDIA Tesla T4 card with 40 cores.) Other optimized and better sizing shall be accepted.	
32.	Use of Al accelerator hardware	FRS shall use extensive AI Technology and perform video processing on GPUs like NVIDIA; INTEL or similar as per design & sizing vetted by AI FRS Algorithm OEM. The number of servers to be supplied, shall be based on the number of camera channels on which the FRS needs to be performed.	

# 8.2.2 Local Processing Unit for Video Analytics

SI.No.	Parameter	Specification	Compliance (Yes/ No)	Remarks
1	Processor	NVIDIA <sup>®</sup> Jetson Xavier™ NX system- on-module (SOM),		
2	Memory	8GB LPDDR4x @ 1600 MHz on SOM (15W TDP mode)		
3	eMMC	16GB eMMC 5.1 on SOM		
4	Ethernet Port	4x Gigabit ports with screw-lock, share 1 Gbps total bandwidth		
5	PoE Capability	In compliant with IEEE 802.3bt PoE++ Type 3 and Type 4 PSE, maximum 90W output on single PoE++ port Compatible with 802.3at (PoE+) and 802.3af (PoE) PD		
6	USB	2x USB 3.1 Gen1 ports (total 5 Gbps shared with M.2 B key)		
7	Video Port	1x DisplayPort, supporting 3840x2160 at 60Hz		
8	Serial Port	1x hardware configurable RS- 232/422/485 port		
9	CAN Bus	1x isolated CAN 2.0 port		
10	Isolated DIO	1x GPS PPS input, 3-CH isolated DI and 4-CH isolated DO		

# RFP for Selection of System Integrator for Supply, Installation, Commissioning &2023Maintenance of CCTV Surveillance System at all SROs

11	Micro SD	1x front-accessible microSD card slot	I I I
12	Ground Terminal	1x M4 ground terminal for chassis	
		ESD shielding	
13	Mini PCI Express	2x full-size mini PCI Express socket	
		(PCle + USB 2.0) for WIFI, GNSS,	
		NVMe storage, V2X, or CAN modules	
14	M.2	1x 3042/3052 M.2 B key (USB 3.1 Gen	
		1 + USB 2.0) for 4G/5G module with	
		dual SIM support (1x front-accessible,	
		1x internal)	
15	DC Input	1x 3-pin pluggable terminal block for	
		8V to 35V DC input and ignition	
		power control (V+/ GND/ IGN)	
16	Cyber Security	NGAV and EDR from any OEM in	
		Leader's Quadrant of Gartner Report	
17	Mounting	Wall-mount bracket (optional)	
18	Humidity	10%~90%, non-condensing	
19	Vibration	Operating, MIL-STD-810G, Method	
		514.7, Category 4	
20	Shock	Operating, MIL-STD-810G, Method	
		516.7, Procedure I	
21	EMC	CE/FCC Class A, according to EN	
		55032 & EN 55035	
		EN 50121-3 (EN 50155:2017, Clause	
		13.4.8)	

# 8.2.3 Specifications for Civil Interiors

All Civil, Electrical and Furniture items as required for setup at Command & Control Location.			
Sl. No.	Specification	Compliance (Yes/ No)	Remarks
1	12 no. of ergonomic chairs each with 5 wheels, hand and high back support and leather finishing to be supplied.		

-		
2	Workstation Console Desk made of MDF laminated board	
	for 4 number of operators in front of the video wall to be	
	supplied. Each console shall have retractable keyboard	
	drawer and 2 no. of monitor mounting adjustable stand.	
	The console desk should have internal LAN and electrical	
	cable channel with MCBs, switches and Fans.	
	The workstation desk should have 3 no. of table top, 5	
	Amp plug points with switch for each operator and 3 no.	
	of 5 Amp plug points with switch for connecting the	
	workstation below the desk. The workstation desk should	
	have channel for passing video cables from monitors to	
	workstation placed below the desk.	
3	False ceiling work in the CCTV Monitoring room and	
	Server/ NOC room.	
4	Ceiling mounted LED lights at CCTV Monitoring room and	
	Server/ NOC room.	
5	Minimum 8 no. of Multisensor Smoke Alarm with Fire	
	Alarm Control panel at CCTV Monitoring room and Server/	
	NOC room.	
6	3 no. of LED baton and 3 no. of Wall mounted Fan at CCTV	
	Monitoring room along with plug point for fans and switch	
	board for the LED and all other electrical equipment.	
7	2 no. of heavy Fire Rated Steel Doors with frame, Hydraulic	
	Door closer, Panic Bar Exit device, EM Locks connected	
	with the Access control system for CCTV Monitoring room	
	and Server/ NOC room.	
8	Partition wall between CCTV Monitoring room and Server/	
	NOC room.	
9	2 no. of 2 KG Portable Fire Extinguisher	
10	Painting and restoration of the CCTV Monitoring room and	
	Server/ NOC room.	
11	CCTV Camera, Access Control system and ACs along with	
	all power and network cabling in the CCTV Monitoring	
	room and Server/ NOC room.	
12	Any other Civil, Mechanical, Flooring, Electrical and	
	Furniture work in the CCTV Monitoring room and Server/	
	NOC room.	
L		

# 9 Annexures

## 9.1 Annexure I: Pre-Qualification Checklist

S. No.	Item	Complied (Yes/ No), Page No. of Bid	Remarks
1.	Bid Cover Letter as per Annexure-II		
2.	Bidders Profile as per Annexure-III		
3.	Self-attested certificate regarding blacklisting as per Annexure-IV		
4.	All pages of bid are numbered and Manually/Digitally signed by authorized signatory		
5.	Power of Attorney/Letter of Authorization		
6.	Proof of payment of EMD and Tender Document Fee		
7.	Copy of the Certificate of Incorporation and Certificate of Commencement of Business		
8.	Copy of PAN/TAN and GST		
9.	Proof of Turnover (As described in Pre-Qualification Criteria)		
10.	Proof of Net Worth (As described in Pre-Qualification Criteria)		
11.	Proof of Certifications (As described in Pre-Qualification Criteria)		
12.	Proof of Experience (As described in Pre-Qualification Criteria)		
13.	Undertaking on Total Responsibility as per Annexure-V		
14.	No Deviation Certificate as per Annexure-VI		

#### 9.2 Annexure II: Bid Cover Letter

No.

Date:

Τo,

The General Manager (Admin)

Odisha Computer Application Centre

(Technical Directorate of E&IT Dept, Govt. of Odisha)

N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Dear Sir/Madam,

Having examined Request For Proposal [*RFP number*] dated [*Insert RFP Date*], the receipt of which is hereby acknowledged, we, the undersigned, offer to provide services (as specified in the RFP) to put into operation the Project for "Supply, Installation, Commissioning & Maintenance of CCTV Surveillance System for e-Registration Project of Revenue and Disaster Management Department Government of Odisha", The Total Solution Bid Price is in accordance with the Price Schedules herewith made part of this bid.

We undertake, if our bid is accepted, to adhere to the timelines for roll-out of the project as outlined in this RFP.

We declare that we have studied the RFP and are making this proposal as specified in the RFP.

We also declare that we have studied the necessary locations and systems necessary for the development of this Technical and Commercial bid.

We have read the provisions of RFP and confirm that these are acceptable to us. All necessary clarifications sought for by us had been duly clarified in writing, by the OCAC.

We undertake, if our bid is accepted, to commence the work on the project immediately upon your Notification of Award to us, and to complete it within the time stated in the Bidding Documents. We also understand that Bids with Commercial Values for solution entered in the Technical Proposal shall be summarily rejected. If our bid is accepted, we undertake to provide a Performance Guarantee in the prescribed form and, for the amount, and within the times specified in the RFP.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the relevant laws against fraud and corruption in force in India.

We agree to abide by this bid, consisting of this letter, the Price Schedules, EMD, the Power of Attorney, and all the Annexure to this Bid Form, for the period of bid validity from the date fixed for submission of bids as stipulated in the RFP, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

We agree to abide by all the requirements prescribed in this bid document for the duration of the contract, if awarded to us.

Until the formal order is placed and final Contract is prepared and executed between us, this bid, together with your written acceptance of the bid (if provided) and your notification of award, shall be a binding contract on us.

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)Name:Designation:Date:Time:Seal:Business Address:

S. No.	Information Sought	Details to be Furnished
1.	Name and address of the bidding	
	Company	
2.	Incorporation status of the firm	
	(public limited / private limited,	
	etc.)	
3.	Year of Establishment	
4.	Date of registration	
5.	ROC Reference No.	
6.	Details of company registration	
7.	Details of registration with	
	appropriate authorities for GST	
8.	Name, Address, email, Phone	
	nos. and Mobile Number of	
	Contact Person	

# 9.3 Annexure III: Bidder's Profile / Particular of Bidder

#### 9.4 Annexure IV: Self-Declaration regarding Non-Blacklisting

<To be submitted on the Letterhead of the responding agency>

Τo,

The General Manager (Admin)

Odisha Computer Application Centre

(Technical Directorate of E&IT Dept, Govt. of Odisha)

N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

**Subject:** Self Declaration of not been blacklisted in response to the RFP for Selection of System Integrator for Integrated Command & Control Center.

Dear Sir/Madam,

We confirm that our company, \_\_\_\_\_\_, is not blacklisted in any manner whatsoever by any of the State/UT and/or central government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

(Signature of	the Authorized signatory of the Bidding Organization)
Name	:
Designation	:
Date	:
Time	:
Seal	:
Business Add	ress :

**Note:** The Bidder shall necessarily provide a copy of 'Power of Attorney' authorizing the signatory for signing the Bid on behalf of the Bidder in its Pre-Qualification Bid.

#### 9.5 Annexure V: Undertaking on Total Responsibility

<To be submitted on the Letterhead of the responding agency>

Τo,

The General Manager (Admin)

Odisha Computer Application Centre

(Technical Directorate of E&IT Dept, Govt. of Odisha)

N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

**Sub:** Self certificate regarding Total Responsibility

Dear Sir/Madam,

This is to certify that we undertake total responsibility for the successful and defect free operation of the proposed Project solution, as per the requirements of the RFP for CCTV Sureillance Project.

(Signature of	ne Authorized signatory of the Bidding Organizat	ion)
Name	:	
Designation	:	
Date	:	
Time	:	
Seal	:	
Business Add	ess :	

#### 9.6 Annexure VI: No-Deviation Certificate

<To be submitted on the Letterhead of the responding agency>

Τo,

The General Manager (Admin)

**Odisha Computer Application Centre** 

(Technical Directorate of E&IT Dept, Govt. of Odisha) N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Sub: No Deviation Certificate

This is to certify that our offer is exactly in line with your tender enquiry/RFP (including amendments)

no. \_\_\_\_\_ dated \_\_\_\_\_. This is to expressly certify that our offer contains no deviation in either Technical or Commercial in either direct or indirect form.

(Signature of the Authorized signatory of the Bidding Organization)

Name : Designation : : Date Time : Seal

Business Address :

:

#### 9.7 Annexure VII: Format for Bank Guarantee

Τo,

The General Manager (Admin) Odisha Computer Application Centre (Technical Directorate of E&IT Dept, Govt. of Odisha) N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Whereas as per Clause \*\* *Section* \*\* of the Bid, the Bidder is required to furnish a bank guarantee as Earnest Money Deposit from a scheduled commercial bank (Bank Guarantee).

In consideration of the fact that the Bidder is our valued customer and the fact that they have submitted the Bid, we, (name and address of the bank), (hereinafter called "the Guarantor Bank"), has agreed to bind ourselves, our successors, and assigns to irrevocably issue this Bank Guarantee and guarantee as under.

#### NOW THIS GUARANTEE WITNESSETH: -

#### 1. If the Bidder

- a) Withdraws their Bid proposal during the period of Bid validity specified by the Bidder in the Proposal Cover Letter; or
- b) Having been notified of the acceptance of its Bid by the OCAC during the period of Bid Proposal validity:
  - o fails or refuses to enter into the Contract; or
  - fails or refuses to furnish the performance guarantee, in accordance with the Terms of Reference of the Tender document issued to the Bidders.

- 2. The Guarantor Bank shall immediately on demand pay the IGRS, Department Stamp & Registration without any demur and without having to substantiate such demand a sum of Rs [Amount in Number] xxx [Amount in Words] only (Guaranteed Amount).
- 3. The Guarantor Bank will make the payment of the Guaranteed Amount forthwith on the demand made by the IGRS, Department Stamp & Registration any objection or dispute that may exist or arise.
- 4. The demand of the IGRS, Department Stamp & Registration on the Guarantor Bank for the payment of the Guaranteed Amount, shall be deemed as the final proof of fulfillment of the conditions stipulated in (1) above.
- 5. This Guarantee shall be irrevocable and shall not be discharged except by payment of the above amount by us to the IGRS, Department Stamp & Registration and our liability under this Guarantee shall be restricted to the Guaranteed Amount being Rs [*Amount in Number*] xxx [*Amount in Words*] only.
- 6. If it is necessary to extend this Guarantee on account of any reason whatsoever, we undertake to extend the period of this Guarantee on the request of the Bidder under intimation to the IGRS, Department Stamp & Registration.
- 7. To give full effect to the Guarantee contained herein, the IGRS, Department Stamp & Registration shall be entitled to act as if the Guarantor Bank is the principal debtor in respect of claims against the Bidder and the Guarantor Bank hereby expressly waives all its rights of surety-ship and other rights, if any, which are in any way inconsistent with any of the provisions of this Guarantee.
- 8. Any notice by way of demand or otherwise may be sent by special courier, telex, fax, registered post or other electronic media to our address as aforesaid and if sent by post, shall be deemed to have been given to us after expiry of 48 hours when the same has been posted.
- 9. Our liability under this Guarantee will continue to exist until a demand is made by the IGRS, Department Stamp & Registration in writing or up to and including One Hundred and Eighty (180) days after the period of the Bid Proposal validity, i.e. up to [*Insert date*], and any demand in respect thereof should reach the Bank not later than the above date

Dated ......202X Yours faithfully, For and on behalf of the ...... Guarantor Bank, (Signature) Designation (Address and Common Seal of the bank)

#### 9.8 Annexure VIII: Declaration of activities sub-contracted

Τo,

The General Manager (Admin)

Odisha Computer Application Centre

(Technical Directorate of E&IT Dept, Govt. of Odisha)

N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Dear Sir,

#### Sub: Declaration on Sub-contracting

I/ We hereby declare the following list of activities which we would be sub-contracted.

<u>S. No.</u>	Activity
1	
2	
3	
4	

I/ We would be responsible for ensuring that the sub-contracted work meets the requirements of the OCAC.

(Signature of the Authorized signatory of the Bidding Organization)

Name	:
Designation	:
Date	:
Time	:
Seal	:
Business Address	:

## **10 Tech Forms**

#### **10.1** Tech Form I: Technical Proposal Letter

Τo,

The General Manager (Admin)

**Odisha Computer Application Centre** 

(Technical Directorate of E&IT Dept, Govt. of Odisha)

N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Sub: Submission of the Technical bid for <Name of the Systems Implementation assignment>

Dear Sir/Madam,

We, the undersigned, offer to provide CCTV Surveillance solutions to the OCAC on <a href="https://www.science.com">Name of the</a> Systems Implementation engagement> with your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Proposal, which includes this technical bid uploaded at eNivida Portal.

We hereby declare that all the information and statements made in this technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for 180 days as stipulated in the RFP document.

We hereby declare that we are not insolvent, in receivership, bankrupt or being wound up, our affairs are not being administered by a court or a judicial officer, our business activities have not been suspended and we are not the subject of legal proceedings for any of the foregoing.

We declare that this is our sole participation in this RFP bid and we are not participating/coparticipating through any of other related party or channel.

We understand you are not bound to accept any Proposal you receive.

Thanking you,

# Yours faithfully

(Signature of the Authorized signatory of the Bidding Organisation)

Name	:
Designation	:
Date	:
Time	:
Seal	:

Business Address:

## **10.2** Tech Form II: Technical Evaluation Checklist

	Technical Evaluation Criteria/Sub	Description for Marks	Max Marks
No.	Criteria		
1.	Past Experience of the Bidder		
a.	Technically Compliance to all IT & Non-	Technical Compliance	30
	IT items asked in this RFP.	Documents	
b.	Surveillance Project with minimum 100 Cameras implementation in any Central Govt./State Govt./PSUs across any state in India in the last 10 years.	<ul> <li>For each project the marks would be based on the following:</li> <li>Project with 100 Cameras – 5 marks</li> <li>More than 100 Cameras –</li> </ul>	10
С.	<ul> <li>The bidder must have an experience in implementation of integrated turnkey projects with similar scope (ICT Components) as a System Integrator in the last 7 years.</li> <li>At-least one project with minimum value of project is Rs 20 Crore.</li> <li>(Specifically, each project must have components of IT Hardware, Networking, Surveillance System, NOC/Helpdesk Implementation).</li> </ul>	<ul> <li>10 marks</li> <li>1 project with value &gt;=20 Cr = 10 marks</li> <li>2 projects each with value &gt;=15 Cr = 10 Marks</li> <li>3 projects each with value &gt;=10 Cr = 10 Marks</li> </ul>	10
d.	Bidder should have minimum 100 technically compete IT personnel on their payroll (Full Time Employees (FTE). Documentary evidence in the form of declaration from competent authority of organization to be submitted.	<ul> <li>Up-to 100 FTE = 0 marks</li> <li>&gt;= 101 and &lt; 125 manpower = 5 marks</li> <li>&gt;= 125 and &lt; 150 manpower = 7 Marks</li> <li>&gt;=150 = 10 Marks</li> </ul>	10
e.	Bidders should have a project experience in setup of command & control center in India for any State/PSUs/Smart City	<ul> <li>For each project the marks would be based on the following:</li> <li>1 project = 5 Marks</li> </ul>	10

# RFP for Selection of System Integrator for Supply, Installation, Commissioning & 2023 Maintenance of CCTV Surveillance System at all SROs

	2023	•

2.	/Metro/Railways/ULBs and integration with surveillance component/ITMS etc. in last 7 years. Proposed Solution	• 2 Projects = 10 Marks	
a.	Proposed solution, Approach, Methodology, Project Management and Training Plan, & Technical Presentation	<ul> <li>Bid evaluation committee will evaluate the proposed solution of bidder whether it is in line with the RFP requirement. The quality of the solution and work plan with compliances to the SLA. Evaluation Committee will evaluate whether the implementation methodology is in line with the requirement. The important parameters being: - Plan for meeting the SLA norms. Spare and consumables management plans Proposed Training plan</li> </ul>	30
Total I	Marks		100

#### 10.3 Tech Form III: Unpriced Bill of Material (BoM)

Please fill the following BOM for all the offered components;

S. No.	Item Name	Qty	Make	Model	Product Brochure (Y/N)	MAF Submitted (Y/N)

**Note**: Please attach technical specifications compliance sheet (on Bidder's letter head only) and provide reference number in this Table. (Deviations, if any, should be appropriately mentioned & highlighted in the compliance/ deviation column of the respective Compliance Table.

#### **10.4** Tech Form IV: Proposed Solution

Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present Approach and Methodology divided into the following sections:

- a) Understanding of the Project
- b) Solution Proposed
- c) Technical Approach and Methodology
- d) Work Plan
- e) Resource Deployment Plan
- f) Operation & Management Plan

## 10.5 Tech Form VI: Proposed Work Plan

# Activity Calendar Months														
Ħ	Activity	1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
Ν														

## 10.6 Tech Form VII: Team Composition

Name of Staff	Qualification	Experience	Area of Expertise	Position Assigned	Task Assigned

# 10.7 Tech Form VIII: Curriculum Vitae (CV) of Key Personnel

1	Proposed Position					
2	Name of Firm					
3	Name of Expert					
4	Date of Birth			Citizen	ship:	
5	Education					
6	Membership in Profess	sional				
	Associations (Professio	nal				
	Certifications)					
7	Countries of Work Exp	erience	India	T	T	
	nguage Skills		Language	Read	Write	Speak
(Ex	cellent/Good/Average)					
	-					
8	<b>Employment Records</b>					
					1	
	rom			То		
	mployer					
P	osition Held					
F	rom		То			
E	mployer				·	
P	osition Held					
F	rom			То		
E	mployer					
P	osition Held					
	Project Name					
	Year					
	Location					
	Client					
	Main Project Features					
	Position Held					
	Activities Performed					
	Project Name					]

Year	
Location	
Client	-
Main Project Features	
Position Held	-
Activities Performed	
	<u>.</u>
Project Name	
Year	
Location	
Client	
Main Project Features	
Position Held	
Activities Performed	
	·
Project Name	
Year	
Location	
Client	
Main Project Features	
Position Held	
Activities Performed	
Project Name	
Year	
Location	
Client	
Main Project Features	
Position Held	
1 OSICION FICIA	

Expert's contact information:-E-mail:-

#### **10.8** Tech Form IX: Manufacturer Authorization Form (MAF)

Date: dd/mm/yyyy

Τo,

The General Manager (Admin)

**Odisha Computer Application Centre** 

(Technical Directorate of E&IT Dept, Govt. of Odisha)

N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Dear Sir/Madam,

We, [Insert name and address of the manufacturer] who are established and reputed manufacturers of [Insert names of items as per RFP] having office at [Insert addresses of office locations] do hereby authorize M/s [Insert name and address of the bidder] to bid, negotiate and conclude the contract with you against the above-mentioned tender for the below equipment manufactured by us.

S. No.	Item Name	Make	Model

We hereby confirm that all the above equipment manufactured by us is not going to be end of sale within next 6 months from the bid quoted.

We hereby also confirm that we will not supply any obsolete items for this tender and will support with spares during project period of 5 Years

Yours faithfully,

For and on behalf of M/s [Name of the manufacturer]

Signature:

Name:

Designation:

Address:

Date:

## **10.9** Tech Form X: Technical Compliance Sheet

As per Technical & Functional specification given in section 9 of this RFP.

### **10.10** Tech Form XI: Undertaking on Authenticity of Equipment

(To be filled by the bidder (On Rs. 100/- Non-judicial stamp paper)

Τo,

The General Manager (Admin)

Odisha Computer Application Centre

(Technical Directorate of E&IT Dept, Govt. of Odisha) N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Sub: Undertaking on authenticity of equipments proposed

### Sir/Madam

This has reference to the items being supplied/ quoted to you vide our bid ref. no. \_\_\_\_\_\_\_, we hereby undertake that all the components/ parts/ assembly/ software used in the equipment shall be genuine, original and new components /parts/ assembly/ software from respective OEMs of the products and that no refurbished/ duplicate/ second hand components/ parts/ assembly/ software are being used or shall be used. In respect of licensed operating system, we undertake that the same shall be supplied along with the authorized license certificate with our name/logo. Also, that it shall be sourced from the authorized source for use in India.

In case, we are found not complying with above at the time of delivery or during installation, for the equipment already billed, we agree to take back the equipment already supplied at our cost and return any amount paid to us by you in this regard and that you will have the right to forfeit our EMD/PBG for this bid or debar/ black list us or take suitable action against us.

(Signature of the Authorized signatory of the Bidding Organization) Name :

Designation	:
Date	:
Time	:
Seal	:
Business Address	:

### **11** Commercial Bid Format

Τo,

The General Manager (Admin) Odisha Computer Application Centre (Technical Directorate of E&IT Dept, Govt. of Odisha) N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Reference: Tender Number ...... Dated .....

Dear Sir,

Having examined Request For Proposal [*RFP number*] dated [*Insert RFP Date*], the receipt of which is hereby acknowledged, we the undersigned, offer to quote the amount for delivery of services mentioned in the tender document.

We agree to abide by our offer for a period of 180 days from the last date of submission of commercial bid prescribed by OCAC and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and conditions of the tender and the conditions of the contract applicable to the tender. We do hereby undertake to provision as per these terms and conditions.

- a) There are no commercial deviations.
- b) There are no deviations from the terms and conditions of the tender.

We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organisation)

Date	:	
Designation	:	
Name	:	

Private & Confidential

Time :

Seal :

Business Address:

		Sub Regis	ster Office (	SRO)			
SI. No.	Particulars	Make & Model Name	[A] Quantity	[B] Unit Price for the Equipment (INR)	[C] GST as Applicable Per Unit (INR)	Total Unit Price Including GST (B + C)	[D = A x (B+C)] Total Cost (INR)
1	Conventional Fire Alarm System With Intelligent Siren cum Strobe		01				
2	IP Dome Camera (With POE)		04				
3	IP Bullet Camera (With POE)		02				
4	8 Channel Network Video Recorder (NVR)		01				
5	AI based Video Analytics		02				
6	Local Processing Unit for Video Analytics		01				
7	8 Port L2 Managed POE Switch with 10/100 Mbps		01				
8	1 KVA UPS with 1 Hour Backup		01				
9	6U Wall Mounting Rack		01				
10	32" LED Display System		01				
11	IP Phone		01				
12	Earthing (Chemical) with suitable copper cable for connection up to UPS		01				
13	Cat-6 Cable STP (UOM @ Meter)		300				
14	ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)		300				

### 11.1 Detailed Commercial Format – Item Wise Bifurcation

15	Labor charges for cabling with	300		
	PVC pipe and accessories (UOM			
	@ Meter)			
16	One time Installation, Integration	LS		
	& Hand holding			
Total C	Cost Including GST @ One SRO =	· · ·	·	
[A] Gra	and Total Cost Including GST @ 205 SROs	=		

	Di	strict Reg	gister Office	e (DRO)			
SI. No.	Particulars	Make & Model Name	[A] Quantity	[B] Unit Price for the Equipment (INR)	[C] GST as Applicable Per Unit (INR)	Total Unit Price Including GST (B + C)	[D = A x (B+C)] Total Cost (INR)
1	IP Dome Camera (With POE)		02				
2	IP Bullet Camera (With POE)		02				
3	8 Channel Network Video Recorder (NVR)		01				
4	24 Port L2 Managed POE Switch with 10/100 Mbps		01				
5	1 KVA UPS with 1 Hour Backup		01				
6	6U Wall Mounting Rack		01				
7	Workstations		01				
8	IP Phone		01				
9	50" LED Display System		01				
10	Software to view the cameras & alarms from SRO		01				
11	Earthing (Chemical) with suitable copper cable for connection up to UPS		01				
12	Cat-6 Cable STP (UOM @ Meter)		300				

13	ISI standard PVC pipe (Heavy	300		
	Duty) for UTP Cable wiring with			
	Screw, Wall grip etc. (UOM @			
	Meter)			
14	Labor charges for cabling with	300		
	PVC pipe and accessories (UOM			
	@ Meter)			
15	One time Installation, Integration	LS		
	& Hand holding			
Total C	Cost Including GST @ One DRO =	· · ·	·	
5-1-0		•		
[B] Gra	and Total Cost Including GST @ 30 DR	Os =		

	Command & Control Center (CCC)						
SI. No.	Particulars	Make & Model Name	[A] Quantity	[B] Unit Price for the Equipment (INR)	[C] GST as Applicable Per Unit (INR)	Total Unit Price Including GST (B + C)	[D = A x (B+C)] Total Cost (INR)
1	Server for Command & Control Center Application		02				
2	Central Video Management Software		01				
3	Video Management Software Remote Camera License		1350				
4	Central Dashboard for AI based Video Analytics		01				
5	Workstation		03				
6	24 Port L2 Managed POE Switch with 10/100 Mbps		02				
7	2x2 Video Wall (55")		01				
8	Video Wall Controller with necessary Cables and Connectors		01				
9	IPBX with 500 Ports		01				

IP Phones	06			
42U Rack	02			
5 KVA UPS with 30 Minutes Backup	01			
Earthing (Chemical) with suitable copper cable for connection up to UPS	01			
Cat-6 Cable STP (UOM @ Meter)	400			
ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)	400			
Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)	400			
Furniture Set-up and Civil Interiors work for CCC Room Considering 500 Sqft.	LS			
One time Installation, Integration & Hand holding	LS			
	42U Rack5 KVA UPS with 30 Minutes BackupEarthing (Chemical) with suitable copper cable for connection up to UPSCat-6 Cable STP (UOM @ Meter)ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)Furniture Set-up and Civil Interiors work for CCC Room Considering 500 Sqft.One time Installation, Integration	A THORESO242U Rack025 KVA UPS with 30 Minutes01Backup01Earthing (Chemical) with suitable copper cable for connection up to UPS01Cat-6 Cable STP (UOM @ Meter)400ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with 	A HonesA Hones42U Rack025 KVA UPS with 30 Minutes01Backup01Earthing (Chemical) with suitable copper cable for connection up to UPS01Cat-6 Cable STP (UOM @ Meter)400ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)400Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)400Furniture Set-up and Civil Interiors work for CCC Room Considering 500 Sqft.LSOne time Installation, IntegrationLS	42U Rack       02         5 KVA UPS with 30 Minutes       01         Backup       01         Earthing (Chemical) with suitable copper cable for connection up to UPS       01         Cat-6 Cable STP (UOM @ Meter)       400         ISI standard PVC pipe (Heavy Duty) for UTP Cable wiring with Screw, Wall grip etc. (UOM @ Meter)       400         Labor charges for cabling with PVC pipe and accessories (UOM @ Meter)       400         Furniture Set-up and Civil Interiors work for CCC Room Considering 500 Sqft.       LS         One time Installation, Integration       LS

- All the above price would be in INR only, including GST.
- The above price would include FIVE Years on-site warranty and maintenance support with manpower as mentioned in this RFP.
- L1 will be decided based on the Grand Total Cost Including [A] [B] and [C] for 205+30+1=236 Sites
- The bidder has to compulsorily quote for all items mentioned in the Commercial-bid Tables. In case bidder fails to quote for any of this stage, the bid would be summarily rejected.
- Above is indicative, however the quantity may increase or decrease at the time of placing the purchase order as per actual.
- The tax rates will be mentioned as per standards

5l. No.	District Name	Office Type	Name of Office
1	Angul	DSR	Angul, DSR
2	Angul	Ex Off	Athamallik, Ex-off
3	Angul	Ex Off	Chhendipada,Ex-off
4	Angul	Ex Off	Pallahara, Ex-off
5	Angul	Ex Off	Talcher, Ex-off
6	Angul	Ex Off	Kishorenagar, Ex-off
7	Balasore	DSR	Balasore, DSR
8	Balasore	SRO	Baliapal, SR
9	Balasore	SRO	Basta, SR
10	Balasore	SRO	Jaleswar, SR
11	Balasore	SRO	Jaleswarpur, SR
12	Balasore	SRO	Khaira, SR
13	Balasore	SRO	Nilagiri, SR
14	Balasore	Ex Off	Simulia, Ex-off
15	Balasore	SRO	Soro, SR
16	Bargarh	SRO	Attabira, SR
17	Bargarh	Ex Off	Barapalli, Ex-off
18	Bargarh	DSR	Bargarh, DSR
19	Bargarh	Ex Off	Bhatli, Ex-off
20	Bargarh	Ex Off	Bheden, Ex-off
21	Bargarh	SRO	Padmapur, SR
22	Bargarh	Ex Off	Paikamal, Ex-off
23	Bargarh	SRO	Sohella, SR
24	Baragarh	Ex Off	Bijepur Ex-Off
25	Baragarh	Ex Off	Gaisilet Ex-Off
26	Bhadrak	SRO	Basudevpur,SR
27	Bhadrak	DSR	Bhadrak, DSR
28	Bhadrak	SRO	Bhandaripokhari,SR
29	Bhadrak	SRO	Bonth,SR
30	Bhadrak	SRO	Chandbali,SR
31	Bhadrak	SRO	Dham Nagar,SR
32	Bhadrak	SRO	Dhusuri,SR
33	Bhadrak	SRO	Tihidi,SR
34	Bolangir	Ex Off	Kantabanjhi, Ex-off
35	Bolangir	Ex Off	Luisinga, Ex-off
36	Bolangir	SRO	Patnagarh, SR
37	Bolangir	SRO	Titilagarh, SR
38	Bolangir	Ex Off	Tusura, Ex-off
39	Bolangir	DSR	Bolangir, DSR

## **12** Annexure – Indicative List of Offices to be Covered

40	Boudh	DSR	Boudh, DSR
41	Boudh	Ex Off	Kantamal, Ex-off
42	Cuttack	SRO	Athagargh, SR
43	Cuttack	SRO	Badamba, SR
44	Cuttack	SRO	Banki, SR
45	Cuttack	SRO	Jagatpur, SR
46	Cuttack	SRO	Niali, SR
47	Cuttack	SRO	Salipur, SR
48	Cuttack	Ex Off	Tigiria, Ex-off
49	Cuttack	DSR	Cuttack, DSR
50	Cuttack	SRO	Mahanga, SR
51	Cuttack	SRO	Narsinghpur, SR
52	Cuttack	SRO	Baranga,SR
53	Deogarh	DSR	Deogarh, DSR
54	Dhenkanal	Ex Off	Bhuban, Ex-off
55	Dhenkanal	DSR	Dhenkanal, DSR
56	Dhenkanal	SRO	Hindol, Ex-off
57	Dhenkanal	SRO	Kamakshyanagar, SR
58	Dhenkanal	SRO	Parjang, SR
59	Gajapati	DSR	Gajapati, DSR
60	Gajapati	Ex Off	R.Udayagiri, Ex-off
61	Ganjam	SRO	Aska, SR
62	Ganjam	SRO	Berhampur-R,SR
63	Ganjam	SRO	Berhampur-T, SR
64	Ganjam	SRO	Bhanjanagar, SR
65	Ganjam	SRO	Buguda, SR
66	Ganjam	Ex Off	Chikiti, Ex-off
67	Ganjam	SRO	Digapahandi, SR
68	Ganjam	DSR	Ganjam, DSR
69	Ganjam	SRO	Hinjilikote, SR
70	Ganjam	SRO	K.S.nagar, SR
71	Ganjam	SRO	Khalikote, SR
72	Ganjam	Ex Off	Kodala, Ex-off
73	Ganjam	SRO	Patrapur, SR
74	Ganjam	SRO	Purusottampur, SR
75	Ganjam	SRO	Sorada, SR
76	Ganjam	Ex Off	Kukudakhandi
77	Ganjam	Ex Off	Kanisi
78	Ganjam	Ex Off	Polsara
79	Ganjam	Ex Off	Ganjam Ex-off
80	Ganjam	Ex Off	Seragarh,Ex-Off
81	Jagatsinghpur	SRO	Balikuda, SR

82	Jagatsinghpur	SRO	Debidol, SR
83	Jagatsinghpur	DSR	Jagatsinghpur DSR
84	Jagatsinghpur	SRO	Kujanga, SR
85	Jagatsinghpur	SRO	Raghunathpur, SR
86	Jagatsinghpur	SRO	Tirtol, SR
87	Jajpur	SRO	Barachana, SR
88	Jajpur	SRO	Bari, SR
89	Jajpur	SRO	Dharmasala, SR
90	Jajpur	SRO	Dolipur, SR
91	Jajpur	DSR	Jajpur, DSR
92	Jajpur	Ex Off	Mangalpur, Ex-off
93	Jajpur	SRO	MaNSada, SR
94	Jajpur	SRO	Sukinda, SR
95	Jharsuguda	Ex Off	Lakhanpur, Ex-off
96	Jharsuguda	DSR	Jharsuguda, DSR
97	Kalahandi	SRO	Dharmagarh, SR
98	Kalahandi	Ex Off	Jaipatna, Ex-off
99	Kalahandi	DSR	Kalahandi, DSR
100	Kalahandi	Ex Off	M.Rampur, Ex-off
101	Kalahandi	Ex Off	Th.Rampur, Ex-off
102	Kalahandi	Ex Off	Kalampur,Ex-Off
103	Kalahandi	Ex Off	Koksara,Ex-Off
104	Kalahandi	Ex Off	Junagarh Ex-Off
105	Kalahandi	Ex Off	Kesinga Ex-Off
106	Kendrapara	SRO	Aul, SR
107	Kendrapara	SRO	Garadpur, SR
108	Kendrapara	DSR	Kendrapara, DSR
109	Kendrapara	SRO	Pattamundai, SR
110	Kendrapara	Ex Off	Kanika, Ex-off
111	Kendrapara	SRO	Marsaghai, SR
112	Kendrapara	Ex Off	Rajnagar, Ex-off
113	Keonjhar	SRO	Anandapur, SR
114	Keonjhar	Ex Off	Barbil, Ex-off
115	Keonjhar	Ex Off	Champua, Ex-off
116	Keonjhar	Ex Off	Ghatgaon, Ex-off
117	Keonjhar	Ex Off	Hatadihi, Ex-off
118	Keonjhar	DSR	Keonjhar, DSR
119	Keonjhar	SRO	Sainkul, SR
120	Keonjhar	Ex Off	Telkoi, Ex-off
121	Khurda	SRO	Balipatna, SR
122	Khurda	SRO	Banpur, SR
123	Khurda	SRO	Begunia, Ex-off

124	Khurda	Ex Off	Bolagarh, Ex-off
125	Khurda	SRO	Jatani, SR
126	Khurda	SRO	Khandagiri, SR
127	Khurda	DSR	Khurda(BBSR),DSR
128	Khurda	SRO	Khurda, SR
129	Khurda	SRO	Tangi, SR
130	Khurda	Ex Off	Balianta,Ex-Off
131	Koraput	Ex Off	Bariguma, Ex-off
132	Koraput	DSR	Koraput (Jeypore),DSR
133	Koraput	Ex Off	Koraput, Ex-off
134	Koraput	Ex Off	Kotpad, Ex-off
135	Koraput	Ex Off	Machhkund, Ex-off
136	Koraput	Ex Off	Pattangi, Ex-off
137	Malkangiri	Ex Off	Chitrakonda, Ex-off
138	Malkangiri	DSR	Malkanagiri, DSR
139	Malkangiri	Ex Off	Motu, Ex-off
140	Mayurbhanj	Ex Off	Bahalda, Ex-off
141	Mayurbhanj	SRO	Betnoti, SR
142	Mayurbhanj	SRO	Karanjia, SR
143	Mayurbhanj	DSR	Mayurbhanj ,DSR
144	Mayurbhanj	SRO	Rairangpur, SR
145	Mayurbhanj	Ex Off	Rasagobindapur, Ex-off
146	Mayurbhanj	SRO	Udala, SR
147	Nabarangpur	Ex Off	Dabugaon, Ex-off
148	Nabarangpur	Ex Off	Kodinga, Ex-off
149	Nabarangpur	DSR	Nabarangpur, DSR
150	Nabarangpur	Ex Off	Umerkote, Ex-off
151	Nayagarh	SRO	Daspalla, SR
152	Nayagarh	SRO	Khandapara, SR
153	Nayagarh	DSR	Nayagargh, DSR
154	Nayagarh	SRO	Odagaon, SR
155	Nayagarh	SRO	Ranapur, SR
156	Nuapada	Ex Off	Khariar, Ex-off
157	Nuapada	DSR	Nuapada, DSR
158	Kandhamal	Ex Off	Baliguda, Ex-off
159	Kandhamal	Ex Off	Daringbadi, Ex-off
160	Kandhamal	Ex Off	G-Udayagiri, Ex-off
161	Kandhamal	DSR	Phulbani, DSR
162	Puri	SRO	Brahmagiri, SR
163	Puri	Ex Off	Delanga, Ex-off
164	Puri	SRO	Gop, SR
165	Puri	SRO	Kakatpur, SR

166	Puri	Ex Off	Kanas, Ex-off
167	Puri	Ex Off	Krushnaprasad, Ex-off
168	Puri	SRO	Nimapara, SR
169	Puri	SRO	Pipili, SR
170	Puri	DSR	Puri, DSR
171	Puri	SRO	Satyabadi, SR
172	Rayagada	Ex Off	Bisam Cuttack, Ex-off
173	Rayagada	Ex Off	Gunupur, Ex-off
174	Rayagada	Ex Off	Kasipur, Ex-off
175	Rayagada	DSR	Rayagada, DSR
176	Samabalpur	Ex Off	Kuchinda, Ex-off
177	Samabalpur	Ex Off	Rairakhol, Ex-off
178	Samabalpur	Ex Off	Rengali, Ex-off
179	Samabalpur	DSR	Sambalpur, DSR
180	Sonepur	Ex Off	Binika, Ex-off
181	Sonepur	Ex Off	BirMaharajpur, Ex-off
182	Sonepur	Ex Off	Rampur, Ex-off
183	Sonepur	DSR	Sonepur, DSR
184	Sonepur	Ex Off	Tarava Ex-Off
185	Sundergarh	DSR	Sundergarh, DSR
186	Sundergarh	Ex Off	Banei, Ex-off
187	Sundergarh	Ex Off	Biramitrapur, Ex-off
188	Sundergarh	Ex Off	Hemgiri, Ex-off
189	Sundergarh	Ex Off	Lephgiri, Ex-off
190	Sundergarh	SRO	Panposh, SR
191	Sundergarh	Ex Off	Rajgangpur, Ex-off

Note: Additional 15 sites will be updated at the time of work order.